
Recent Large Service Acquisitions in the Department of Defense

Lessons for the Office of the
Secretary of Defense

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FRANK CAMM
IRV BLICKSTEIN
JOSE VENZOR

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Preface

In August 2001, the Directorate of Acquisition Resources and Analysis in the Office of the Secretary of Defense (OSD) asked the RAND Corporation to identify policy issues relevant to large service acquisitions that deserved closer attention in OSD. RAND agreed to examine a variety of new large acquisitions of different kinds of services in different parts of the Department of Defense (DoD). Based on an initial set of “pilot” case studies, RAND identified a tentative set of policy issues that deserved OSD’s attention. RAND briefed OSD on these issues in December 2001. OSD asked RAND to fill out these case studies with additional information and to expand the number of acquisitions covered in the study to six to test the robustness of the issues identified in the December briefing. In March 2002, OSD also asked RAND to draw on interim findings to help OSD frame new policy on “Acquisition of Services,” as required by the Fiscal Year 2002 National Defense Authorization Act, Section 801.

This report documents the findings that resulted from these efforts. It uses six case studies to identify high-level policy issues for which OSD is likely to become involved in large, innovative service acquisitions as their use expands in DoD. It should interest analysts and practitioners involved in the acquisition of defense services and, more generally, in ongoing acquisition reform efforts in DoD.

The work was conducted in the Acquisition and Technology Policy Program of RAND National Defense Research Institute (NDRI), a unit of the RAND Corporation. NDRI is a federally funded research and development center (FFRDC) sponsored by the

Office of the Secretary of Defense, the Joint Staff, the Unified Commands, and the defense agencies. NDRI conducts research on complex national defense policy and strategy problems for which multidisciplinary capability, objectivity, and an explicit national-interest charter are essential.

Please direct any inquiries or comments on the substantive content of this document to the project leaders, Irv Blickstein and Frank Camm, at 703-413-1100, irv@rand.org, or camm@rand.org.

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Summary

In August 2001, the Directorate of Acquisition Resources and Analysis in the Office of the Secretary of Defense (OSD) asked the RAND Corporation to identify policy issues relevant to large service acquisitions that deserved closer attention in OSD. RAND agreed to examine six new large acquisitions of various kinds of services in different parts of the Department of Defense (DoD) and to extract policy implications relevant to OSD. This report documents our findings from this effort.

Table S.1 provides high-level information about the six cases we examined. We chose these cases, with OSD's concurrence, because they represent as broad a range of new approaches to services acquisition as possible within a limited number of cases. They include

- Each of the armed services and a defense agency.
- Single providers, teams of providers, and even multiple teams of providers, each with its own contract. One provider has two separate prime contracts in one case.
- Large and small providers. Most small providers serve as subcontractors on one of the teams in the sample, but some act as prime contractors that integrate and oversee the services of large and small subcontractors.
- Sole-source providers and providers selected by competition for a continuing program and within a continuing program.
- Purely commercial activities, such as food service in the continental United States, and services with no immediate commer-

Table S.1
Service Acquisitions Examined

Acquisition	Buyer/Seller	Services	Size/Date
Balkans Support Contract (BSC)	Army/Kellogg Brown and Root	Mainly commercial-type support services for deployed forces	\$2.1 billion over 1999–2004/ 5 years
Food Service	Marine Corps/ Sodexo	Food service in all continental U.S. mess halls	\$881 million over 2002–2010/ 8 years
Groundbreaker	National Security Agency/ team of Computer Sciences Corp. and Logicon	Non-core information technology, services at agency headquarters	\$2.0 billion over 2001–2011/ 10 years
F/A-18-E/F Integrated Readiness Support Teaming (FIRST)	Navy/Boeing	Parts, maintenance, reliability, and maintainability improvements	\$770 million over 2001–2006/ 5 years
Rapid Response to Critical Systems Requirements (R2CSR)	Army/3 teams	Parts, maintenance, engineering services, etc.	\$5.4 billion over 1998–2003/ 5 years
Flexible Acquisition and Sustainment Tool (FAST)	Air Force/6 teams	Parts, maintenance, engineering services, etc.	\$7.4 billion over 2001–2008/ 7 years

cial analog, such as full support, in peacetime and wartime, of parts unique to a weapon system that has just entered the operational force. Most are in between.

- A variety of methods for achieving flexibility and responsiveness.
- Large acquisitions of varying size and duration.
- Acquisitions just starting, with fresh information, and older acquisitions, with some history to observe.

Because the services acquisitions studied are fairly new, it will take time to determine how well they work in practice. The case studies offer the best insight into the execution of the two oldest acquisitions, the Army BSC and R2CSR programs. For the other four acquisitions,

we focused on what can be known up through contract award. The insights reported here are based on observations current as of summer 2002. We strongly endorse ongoing efforts to monitor these acquisitions to determine what portion of their promise they realize and to gather useful lessons learned for future DoD service acquisitions from the experience offered by their execution.

Table S.2 summarizes the kinds of services acquisition policy issues addressed in the six acquisitions. Looking across these acquisitions, one sees several general findings emerge.

Table S.2
Major Policy Issues Arising in Cases Studied

Policy Issue	Cases in Study					
	BSC	Food Service	Ground-breaker	FIRST	R2CSR	FAST
Involvement of OSD, Congress	✓	✓	✓	✓	✓	✓
Lower acquisition costs, times					✓	✓
Needs of small, disadvantaged businesses		✓	✓		✓	✓
New forms of competition			✓		✓	✓
New forms of public-private coordination	✓	✓	✓	✓	✓	✓
Innovative contract terms	✓	✓	✓	✓	✓	✓
Delegation of authority to contractor	✓	✓	✓	✓	✓	✓
Dynamic military demands	✓	✓		✓		✓
Managing different types of funds	✓	✓		✓	✓	✓
DoD acquisition skills, processes	✓	✓	✓	✓	✓	✓

Effects of Acquisition Reform in Services Acquisition

Perhaps the most important of the general findings is that many ideas discussed during the 1990s and tested initially in larger system acquisitions are finding their way into services acquisition. Each of the cases highlights different new ideas, but three broad shifts occur almost everywhere:¹

1. **Importance of program management.** The advent of large service acquisitions has increased the importance of program management. This change calls for different skills among relevant DoD acquisition professionals and a different kind of interaction between them and personnel in other DoD organizations.²
2. **Delegation of day-to-day management to contractor.** The trend toward performance-based services acquisition (PBSA) shifts responsibility for day-to-day management from DoD to the contractor. DoD then has an opportunity to think more strategically about how to link contract services to users' needs or to simplify the process users face to get access to contract services.³
3. **Alternatives to arms-length relationships.** Traditionally structured, arms-length relationships between DoD and its providers are giving way to a variety of alternatives, some of which rely more heavily on public-private partnership and joint provision of services, while others allow greater use of competition by simplifying its application. This variety reflects an ability to use discretion to tailor Federal Acquisition Regulation (FAR) arrangements to users' needs rather than having to comply with a few tried and true standard operating procedures.⁴

¹ The row in Table S.2 labeled "Innovative contract terms" reflects more-specific changes in individual contracts.

² The row in Table S.2 labeled "DoD acquisition skills, processes" reflects this trend.

³ The row in Table S.2 labeled "Delegation of authority to contractor" reflects this trend.

⁴ The row in Table S.2 labeled "New forms of public-private coordination" reflects this trend.

OSD's Role in Services Acquisition

Some OSD policies clearly influence these patterns of change, but each of our cases represents an example of a bottom-up effort to take advantage of new opportunities made available by acquisition reform. OSD efforts to promote acquisition reform made these changes possible, but none of the changes is best understood as primarily a deliberate effort to comply with an OSD directive to pursue acquisition reform. Two resulted from OSD initiatives to improve management in DoD, but even these proceeded with limited direction or oversight from OSD.

In several cases, it might be argued that the acquisitions were a creative response to OSD, administration, or congressional efforts to drive policies only tangentially related to the service activities addressed here. For example, high-level priorities favoring competitive sourcing or outsourcing probably helped promote interest in using contract sources. But no one had to develop the creative approaches to using contractors displayed here to comply with those priorities. Similarly, high-level support for applying manpower ceilings in theater increased attention to using contractors to support deployed forces; creative acquisition strategies made it much easier to use contractors in theater.

Future Roles for OSD in Services Acquisition Policy

The six cases suggest that OSD can effectively address continuing change in DoD services acquisition by focusing on three roles:

Linking services acquisition goals to DoD's strategic goals. As acquisition reform continues to transform the acquisition of services in DoD, traditional notions of what is appropriate or even acceptable to do in service acquisitions will inevitably come into question. Ambiguity will continue as long as reform continues, and OSD can help facilitate and coordinate the debate about what DoD really wants in services acquisition. What priorities applied to specific service acquisitions are most compatible with DoD's high-level, strategic goals? The

metrics that OSD uses to monitor service acquisitions should evolve as this debate continues to evolve.

Managing congressional concerns about services acquisition. Congress has been and will continue to be drawn into the design and management of service acquisitions in DoD. To the extent that OSD can anticipate events or decisions in DoD service acquisitions likely to interest Congress, OSD can shape those acquisitions to address Congress's concerns more effectively. Congress appears most likely to get involved if a DoD service acquisition injures or appears to injure a member of a politically powerful constituency. Acquisition issues that have drawn particular interest in recent years include the bundling of work previously performed by small business prime contractors, the outsourcing of work previously performed by government civilians, and the use of a source selection that appears to exclude potential providers unfairly. Congress is more likely to notice large service acquisitions, but our sample was too small to provide insight into how large a service acquisition should be before OSD takes an interest.

Developing and disseminating lessons learned. DoD services acquisition has just begun to reflect insights from best commercial practice, and experimentation and learning can be expected to continue for the foreseeable future. As evidence accumulates on the positive and negative effects of new practices applied in a defense setting, OSD is the natural place to collect this evidence, assess it, and shape it into lessons relevant to practices for future service acquisitions in DoD. Lessons learned are highly likely to include implications for skills relevant to the DoD acquisition force. OSD has an integral role to play in pushing new information into DoD training and personnel management programs for relevant personnel and adjusting these programs as appropriate over time.

Specific Substantive Policy Issues for OSD to Consider

As OSD pursues the broad oversight roles described above, services acquisition is likely to raise a series of more specific challenges. OSD can expect these challenges to arise repeatedly as it clarifies links be-

tween DoD's strategic goals and its goals for services acquisition, manages the components' relationships with Congress with regard to services acquisition, and seeks to develop and disseminate lessons learned from ongoing experiments in services acquisition.

Criteria other than cost. The acquisitions reviewed all rely heavily on criteria other than cost to define the contractual terms relevant to executing their contracts. Those that used competitive source selections all relied heavily on non-cost criteria in those source selections. Criteria other than cost are essential to efforts (like those reviewed here) to build longer-term relationships that give providers enough discretion for DoD to benefit from their various commercial capabilities. Such criteria will likely prove critical to the success of DoD's efforts to expand the use of performance-based service contracting (PBSC), since successful PBSC arrangements rely heavily on the quality of a provider. Despite the growing importance of non-cost criteria in services acquisition, however, Congress continues to prevent their effective use in public-private competitions and, in its most recent action on services acquisition in DoD, the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2002, still emphasized the importance of cost savings as a measure of success. DoD's 5000-series acquisition documents recognize the importance of non-cost criteria to services acquisition. DoD must ensure that specific service acquisitions benefit as much as possible from the use of such criteria in source selections and performance agreements.

Support of contingencies. Recent events associated with 9/11⁵ and the wars in Afghanistan and Iraq illustrate how volatile the global political-military environment is today. As DoD continues to outsource and bring contract services closer to the warfighter, it will need to give more and more attention to building contractual relationships flexible and responsive enough to succeed in the global environment. The acquisitions we examined illustrate how to build broadly flexible arrangements (BSC, FAST, R2CSR) and arrangements with specific terms that allow goals and incentives to change during contingencies

⁵ The Al Qaeda attack on the United States on 11 September 2001.

(FIRST, Marine Corps food service). They also caution that flexible arrangements pose control issues. DoD must decide how much it is willing to pay, in dollars and in performance, for flexibility and responsiveness in service acquisitions.

Treatment of small and disadvantaged businesses. The most persistent issue identified in the acquisitions we reviewed is probably the treatment of small and disadvantaged businesses. Such businesses have traditionally provided much of the contract service support DoD receives, especially for less complex activities. But commercial practice is increasingly demonstrating the economies of scale and scope and the improvements in contractor alignment and accountability that come from bundling contracts. DoD will continue to increase its use of bundled services. The acquisitions reviewed (especially FAST, Marine Corps food service, R2CSR) illustrate that the success of this trend depends on Congress and the advocates for small and disadvantaged businesses being fully engaged and satisfied with the bundling plans devised. The cases illustrate techniques for providing attractive opportunities for small and disadvantaged businesses within bundled activities—for example, set-asides for small businesses acting as prime contractors for bundled services, subcontracting set-asides within bundles, mentoring relationships between large primes and small and disadvantaged subcontractors to help the subcontractors grow, and improved methods for ensuring timely payment of subcontractors. They also illustrate the importance of screening small and disadvantaged businesses carefully to ensure they can operate effectively within a bundled service agreement and of integrating them effectively into the bundle.

Public-private partnering. New ways for DoD to partner with contractors during execution of contract services came up repeatedly in the acquisitions we reviewed. Examples include

- Participating in ongoing operational support planning activities (BSC, FIRST).
- Integrating DoD and contractor portions of an end-to-end value chain under a contractor's control (FIRST).

- Providing on-the-job training to government personnel in contractor-operated settings (Marine Corps food service).
- Auditing contract performance (Groundbreaker).
- Marketing a government service to other government organizations (FAST, R2CSR).

These are just some of the many opportunities likely to be available, each of which will depend on the particular circumstances of the service acquisition. Because these push the envelope of accepted federal acquisition practice, however, they are likely to draw particular attention and to benefit from careful review.

Treatment of displaced government civilians. Growing outsourcing of services will increasingly displace government civilians. When DoD outsourced in the past, it could typically give its displaced employees the opportunity to take a position elsewhere in DoD, because the number of displaced billets was small relative to total DoD billets or even turnover in personnel filling those billets. If competitive sourcing and other initiatives continue to outsource billets at current rates, DoD will no longer be able to provide the same protection. OSD will need to pay increasing attention to how DoD protects displaced civilians. This was an important issue in only one of the cases reviewed here (Groundbreaker), but this one offers a useful object lesson on what is involved.

Barriers to innovation in services acquisition. As acquisition reform exploits new opportunities, new barriers come to light. Congressional requirements to maintain different kinds of funds—different “colors of money”—limit DoD’s ability to hold contractors accountable for cost-effective trade-offs (FIRST, Marine Corps food service, R2CSR). Current DoD interpretations of commercial pricing force the use of firm-fixed prices for acquisitions of services that real commercial firms would use cost-based pricing for (BSC). This practice is likely to raise long-term costs to DoD by forcing contractors to bear risks they cannot control effectively. The mechanics of Office of Management and Budget Circular A-76 make it difficult or impossi-

ble to structure acquisitions that dramatically change how work scope is specified (Groundbreaker).⁶ These policies, and others like them, will continue to inhibit the gains of acquisition reform unless OSD can find ways to adjust their application in DoD.

Comparison with Recent Services Acquisition Policy Initiatives

The policy implications of the large service acquisitions we reviewed are broadly compatible with those of two recent initiatives relevant to DoD services acquisition: the “Acquisition of Services” Review Process that Under Secretary of Defense (Acquisition, Technology, and Logistics) (AT&L) devised in 2002 to implement Sec. 801 of the NDAA for FY 2002;⁷ and the Services Acquisition Reform Act, H.R. 1837, that Congressman Tom Davis introduced into the House of Representatives Government Reform Committee in April 2003 (SARA II).⁸ To summarize:

- Both favor efforts to tailor arrangements in large acquisitions so that provider capabilities are as closely aligned as possible with DoD’s strategic goals.
- Both favor efforts that encourage the DoD components to innovate in ways that advance this alignment. H.R. 1837 offers a variety of specific adjustments in the application of the FAR that are designed to do this, even though doing so alters the federal government’s traditional views on integrity, equity, and effi-

⁶ Office of Management and Budget, 1999. A-76 governs competitive sourcing in the federal government, one of the five priorities on President Bush’s management agenda (Office of Management and Budget, 2001).

⁷ DoD Instruction 5000.2 (U.S. Department of Defense, 2003c, Enclosure E8); Aldridge, 2002; and Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics), 2002. This last document, “Review of Department of Defense (DoD) Acquisition of Services,” implements Sec. 801(d) of the NDAA for FY 2002 (P.L. 107-107).

⁸ Full text available at <http://capwiz.com/govexec/webreturn?url=http://thomas.loc.gov/cgi-bin/query/z?c108:H.R.1837> (as of 12 May 2003).

ciency. The acquisitions we reviewed suggest that the adjustments will succeed only if the new training envisioned in H.R. 1837 is properly framed.

- The AT&L process highlights the importance of giving OSD better oversight on a short list of special-interest issues very similar to those identified here.
- A potential source of future difficulty is that the definition both initiatives use for performance-based services contracting (PBSC) differs from the standard definition in FAR Part 37.6. Their definition could give the government far more control than either initiative intends over how a contractor provides a service, and more control than the acquisitions we reviewed might conclude was compatible with the best alignment between DoD's strategic goals and provider capabilities.

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Acronyms and Initialisms

AFMC	Air Force Materiel Command
ALC	air logistics center
AMC	Army Materiel Command
ASG	area support group
AT&L	Under Secretary of Defense (Acquisition, Technology, and Logistics)
BRAC	base realignment and closure
BRS	Brown and Root Services
BSC	Balkans Support Contract
CECOM	U.S. Army Communications and Electronics Command
CICA	Competition in Contracting Act of 1984
CLIN	contract line item number
CONUS	continental United States
CPAF	cost-plus-award-fee
CPARS	Contractor Performance Assessment Report System
CPIF	cost-plus-incentive-fee
CSA	Customer Support Agreement
CSC	Computer Sciences Corporation
DAB	Defense Acquisition Board
DCMA	Defense Contract Management Agency

DLA	Defense Logistics Agency
DO	delivery order
DoD	Department of Defense
EDAL	electronic data access library
EPA	economic price adjustment
EUCOM	U.S. European Command
FAR	Federal Acquisition Regulations
FAST	Flexible Acquisition and Sustainment Tool
FIRST	F/A-18-E/F Integrated Readiness Support Team
FPDS	Federal Procurement Data System
FPI	fixed-price-incentive
FY	fiscal year
GAO	General Accounting Office
GSA	General Services Administration
HQ	headquarters
IDIQ	indefinite delivery, indefinite quantity
IETM	interactive electronic technical manual
IIRA	industry-involved risk assessment
IPT	integrated process team
ISO	International Organization for Standardization
IT	information technology
ITT	integrated test team
JARB	joint acquisition review board
JCC	Joint Contracting Center
JSTARS	Joint Surveillance and Target Attack Radar System
KBR	Kellogg Brown and Root (formerly Brown and Root Services)
LOGCAP	Logistics Civil Augmentation Program
LSAD	logistics support analysis database

MAS	multiple award schedule
MILCON	military construction
MILSPEC	military specification
MIPR	military interdepartmental procurement request
NADEP	Naval aviation depot
NAVAIR	Naval Air Systems Command
NAVICP	Naval Inventory Control Point
NDAA	National Defense Authorization Act
9/11	Al Qaeda assault on the United States on 11 September 2001
NISH	National Industries for the Severely Handicapped
NMCI	Navy Marine Corps Intranet
NSA	National Security Agency
O&M	operations and maintenance
O&S	operation and support
OCI	organizational conflict of interest
OJFS	Operation Joint Force Sustainment
OMA	Operations and Maintenance Army
OPFF	Office of Federal Procurement Policy
OMB	Office of Management and Budget
OSD	Office of the Secretary of Defense
PBSA	performance-based services acquisition
PBSC	performance-based services contracting
PRAG	performance risk assessment group
QA	quality assurance
QAE	quality assurance evaluator
QC	quality control
R&D	research and development
R&M	reliability and maintainability

RFOP	request for operating plan
RFP	request for proposal
RIF	reduction in force
RTP	request for task proposal
R2	Rapid Response
R2CSR	Rapid Response to Critical Systems Requirements
SAIC	Science Applications International Corporation
SARA	Services Acquisition Reform Act
SBRA	Small Business Reauthorization Act of 1997
SCOP	Services Contracts Oversight Process
SIGINT	signals intelligence
SIPRNet	Secret Internet Protocol Router Network
SLA	service-level agreement
SOFA	status of forces agreement
SOW	statement of work
SPO	system program office
SSAI	Support Systems Associates Inc.
TAMSCO	Technical and Management Services Corporation
TF	task force
TO	task order
TSSR	total system support responsibility
USACE	U.S. Army Corps of Engineers
USAREUR	U.S. Army in Europe
WBS	work breakdown structure

Introduction

Even though the Department of Defense (DoD) has been spending more money on services than on goods for some time now, DoD acquisition policy and training for its acquisition workforce continue to emphasize goods.¹ As DoD's purchases of services grow in importance and expose DoD more and more to unfamiliar commercial acquisition practices, senior leaders are recognizing the need to ensure that DoD acquisition policy and training can support effective purchasing practices for services.

Services Acquisition in DoD

From fiscal year (FY) 1997 through FY 2001, DoD's real spending on services rose 10 percent, to \$77.0 billion a year.² This accounted for 54 percent of the total that DoD spent on purchased goods and services and 17 percent of DoD's total budget in FY 2001. Over this

¹ For example, see the keystone DoD document on acquisition policy, DoD Directive 5000.1 (U.S. Department of Defense, 2003b). It states that "the primary objective of Defense acquisition is to acquire quality products" (Sec. 4.2) and then distinguishes "services" from "products" (see, for example, Sec. E1.18). Design, development, and manufacture of new products dominate the directive.

² Data in this paragraph are from the General Accounting Office (GAO), 2003, pp. 26, 32. Spending data are stated in FY 2001 (the most recent period for which relevant data are available) dollars and are based on reports from the Federal Procurement Data System (FPDS), corrected for errors identified by GAO. FPDS tracks all federal government purchases larger than \$25,000; the inclusion of smaller purchases would increase estimates of DoD spending on services still further.

period, the largest increases came in purchases of information services (46 percent increase); professional, administrative, and management services (21 percent); and medical services (22 percent). At the same time, DoD's acquisition workforce fell 9 percent.

A number of factors drive these trends. For example, public and private organizations in the economy as a whole are moving toward greater use of external sources of support services, and DoD is following that lead, especially in its procurement of highly technical services, which often require skills not present in the federal workforce. This trend has the most immediate effect on DoD's need for services to support new, technically sophisticated weapon and information systems. More broadly, as DoD has increased its outsourcing through vehicles such as the Office of Management and Budget's (OMB's) competitive sourcing program, dollars previously spent in-house are now spent on services provided by external or outside sources. Increasingly, DoD is substituting purchased services for goods it purchased to provide those same services in-house. So, for example, when DoD "privatizes" utilities or housing, DoD stops paying to build utility infrastructure or housing assets and starts paying someone for the services yielded by external investment in utility infrastructure or housing assets.

At the same time, DoD has been changing its approach to acquisition through a series of acquisition reform initiatives. Reform first focused on the acquisition of major systems. As implementation there progressed, and services grew in importance, reform has given increasing attention to DoD's acquisition of services. Broadly speaking, reform initiatives have attempted to bring innovations from commercial practice into a defense setting. For example, initiatives ask DoD acquisition professionals to³

- Focus less on compliance issues and more on crafting arrangements that advance the interest of buyer organizations. As part of this effort, they are being asked to take full advantage of the

³ For a more complete discussion of these changes, see Anderson, 1999; Camm, 2002; Camm, 2003; and Moore et al., 2002.

discretion that the Federal Acquisition Regulation (FAR) allows, and to not simply use contract language they have used elsewhere or assume that a practice not explicitly highlighted in the FAR is prohibited.

- Work more closely with the organizations that will use the services purchased, both to craft acquisitions that address these organizations' priorities and to reduce the time required to complete acquisitions.
- Work more closely with potential providers, both to craft acquisitions that take greater advantage of the providers' capabilities and to reduce the regulatory burden that doing business with the federal government places on providers. This involves more aggressive use of market research and more open interaction with potential providers in the early stages of an acquisition.
- Use commercial methods that will attract nontraditional providers who can increase the quality of services delivered and reduce their costs without creating concerns about reliability. Such methods include greater reliance on (1) best-value competitions and assessments of past performance in source selection, (2) performance-based work scopes that tell providers what to provide, not how to produce it, and (3) performance management methods based more on incentives and less on detailed government surveillance of provider execution.
- Simplify acquisitions in ways that reduce the time and cost associated with getting access to high-quality sources without compromising FAR policies that support the use of full and open competition and the use of small and disadvantaged businesses.

The most recent initiative relevant to federal services acquisition is the Services Acquisition Reform Act, introduced into the Congress as Bill H.R. 1837 on 29 April 2003. It is known as SARA II, because it closely parallels a similar proposal with the same name that was introduced in the previous Congress. Table 1.1 highlights its key features relevant to our study.

4 Recent Large Service Acquisitions in the Department of Defense

Table 1.1
Features of the Services Acquisition Reform Act, H.R. 1837,
Relevant to Case Studies

Key Feature of Sara II ^a	Motivation
Expand the definition of the acquisition workforce (Sec. 101); provide for improved training on changes in nature of federal acquisition (Secs. 102, 103)	Facilitate the cross-functional approach to services acquisition needed to accelerate acquisitions and design high-performance agreements
Expand the scope of contracts deemed commercial item contracts to include noncommercial items of a commercial entity using FAR Part 12 ^b under certain circumstances* (Secs. 401, 404)	Simplify participation of nontraditional providers in defense contracts for services; simplify oversight of such providers
Expand the use of share-in-savings contracts (in which companies receive a portion of the agency savings of modernization) to all contracts, not just information technology contracts* (Sec. 301)	Create incentives that support devolution of decisionmaking and financial responsibility from the government buyer to the provider
Allow the use of time-and-materials and labor-hour contracts for commercial services* (Sec. 402)	Use best commercial practices that properly match pricing structure to risks
Encourage use of performance-based services acquisition* (Sec. 401)	Devolve responsibility for deciding how to execute government contracts
Codify use of award-term contracts (extending the contract period as a reward for good performance)* (Sec. 302)	Use best commercial practice to reduce acquisition costs and reward good performance
Use technology to speed and simplify payment of providers (Sec. 211)	Simplify acquisition to attract nontraditional sources
Permanently allow emergency procurement flexibility* (Sec. 502)	Encourage flexible acquisition practice in a newly uncertain global political-military environment

^aCells marked with an asterisk (*) use language from Armes, 2003. Full text of H.R. 1837 is available at <http://capwiz.com/govexec/webreturn?url=http://thomas.loc.gov/cgi-bin/query/z?c108:H.R.1837> (as of 12 May 2003). The 8 May 2003 mark-up in the House Government Reform Committee amended portions of the bill available at this Web site, but not in any way pertinent to the discussion here. The bill is compatible with DoD's new high-level guidance on acquisition, provided in DoD Directive 5000.1 and DoD Instruction 5000.2 (U.S. Department of Defense, 2003b and 2003c). SARA II in effect seeks a series of clarifications and amplifications relevant to the implementation of Directive 5000.1 and Instruction 5000.2. See Armes, 2003, and Ballard, 2003, for more information about the bill and initial reactions to it.

^bOffice of Federal Procurement Policy, 2003a.

The features of SARA II illustrate a continuing effort to bring best commercial services acquisition practices into the government. These practices seek to simplify services acquisition and reduce its cost, as well as to induce providers to take more responsibility and be more flexible and responsive.

OSD's Role

The Office of the Secretary of Defense (OSD) has played an active role in individual major system acquisitions for many years. The Defense Acquisition Board (DAB) and analogous predecessors have reviewed the progress of major system acquisitions at fixed milestones. OSD has also played an active role in programming and budgeting for system acquisitions individually itemized for funding in the defense budget. Until 2002, OSD had no similarly defined role for service acquisitions. Individual service acquisitions generally escaped high-level visibility; they tended to be too small to justify a DAB-type review. They also were funded not by congressional line item, but by the services and agencies in DoD, using more loosely fenced operations and maintenance (O&M) dollars that did not receive as detailed a level of scrutiny in the programming and budgeting process.⁴ The personnel responsible for service acquisitions had less training and less experience than those responsible for major system acquisitions, and service acquisitions could be conducted by the individual services and agencies without additional oversight from OSD.

⁴ Financial managers "fence" money by limiting how it can be obligated or spent. Tightly fenced funds can only be used for narrowly defined purposes or during narrowly defined periods. Loosely fenced funds are more fungible or versatile. Congress routinely maintains close oversight on DoD's use of the procurement funds that have dominated systems acquisition in the past. Congress has imposed less oversight on the use of O&M dollars that dominate services acquisition.

The National Defense Authorization Act (NDAA) for FY 2002⁵ prescribed new oversight arrangements for DoD service acquisitions. NDAA required DoD to define a new management structure for its procurement of services, to collect additional data on such procurements, and to devise a program review process for them. It required DoD to establish goals for achieving savings in its procurements of services by applying performance-based service contracts, competition for task orders in multiple-award contracts, and best commercial practices. And it required that DoD ensure the use of competition for large task orders in multiple-award contracts. Each of these requirements included detailed implementation guidance.

OSD issued the first formal guidance to implement this policy in May 2002.⁶ These detailed requirements significantly increased the visibility of service acquisitions in OSD and OSD's responsibility for their oversight.

OSD's role in services acquisition is likely to continue to evolve as DoD gains more experience with different kinds of acquisitions. This report documents insights from case studies of six recent large service acquisitions. These six cases show how OSD has been drawn into individual acquisitions in the past. They also suggest the types of policy issues likely to occur in the future that will continue to demand OSD's attention.

Roadmap

Four chapters follow this introductory chapter. The first, Chapter Two, provides an overview of our analysis. It briefly describes our analytic approach, lists some critical facts about the six service acquisi-

⁵ P.L. 107-107, esp. Secs. 801-803. Exact language is at <http://www.wifcon.com/dodauth02.htm> (as of 30 April 2003).

⁶ DoD Instruction 5000.2 (U.S. Department of Defense, 2003c, Enclosure E8); Aldridge, 2002; and Office of the Under Secretary of Defense (Acquisition, Technology, and Logistics), 2002. This last document, "Review of Department of Defense (DoD) Acquisition of Services," implements Sec. 801(d) of the NDAA for FY 2002 (P.L. 107-107). Chapter Five of our report discusses AT&L's implementation in more detail.

tion cases we examined, and explains why we chose each case. It also summarizes our basic findings and the major policy issues associated with the case studies.

Chapter Three briefly describes each of the six service acquisitions. For each case, it highlights the motivation for the acquisition, the approach taken, and the features that deserve special attention.

Chapter Four describes the set of policy issues that emerged from these case studies. It relates each policy issue to the particulars of the relevant cases and to OSD's policy concerns, and it suggests implications for OSD.

Chapter Five draws together the most important lessons that these cases offer OSD. It identifies a set of general issues, suggests specific topics that would benefit from additional attention, and sets out observations on recent and ongoing changes in policies related to federal government services acquisition.

Eight appendices follow Chapter Five. Appendix A supports the discussion in Chapter Two with a representative example of the structured instrument used to frame each interview in our data collection efforts. Appendices B through H provide supportive materials for Chapter Three's description of the six cases. Appendix B summarizes the generic structure of the case studies; Appendices C through H then provide additional information on each acquisition, summarizing the principal findings of our literature review and interviews.

Overview of the Analysis

This chapter provides a basic overview of our analysis. It discusses the high-level policy goals of OSD (Acquisition, Technology, and Logistics) (AT&L) that were used in framing our analysis, along with the basic questions we sought to answer. It then presents the critical facts about the six service acquisition case studies we examine and explains why we chose each one. Finally, it previews the findings of our analysis and offers a caveat.

High-Level Policy Goals Relevant to Services Acquisition

AT&L uses a formal set of goals and subgoals to help coordinate its resource and policy decisions.¹ Table 2.1 summarizes the objects of these goals and subgoals,² which we used in framing our analysis.³

¹ OUSD (AT&L), 2001. AT&L maintains five major goals, four of which are relevant to our case studies. We do not consider the fifth—"initiate high-level technologies to create warfighting capabilities, systems, and strategies of the future" (p. 5)—because it addresses development of new weapons and concepts, not the acquisition of services. Cf. GAO, 2003, p. 41.

² For example, AT&L wants to *increase* the credibility and effectiveness of acquisition and logistics support in DoD and to *decrease* acquisition cycle time. This table focuses on the objects of interest to AT&L and not on the direction in which it wants to move them.

³ For a discussion of how to use such goals to improve services acquisition, see Baldwin, Camm, and Moore, 2000.

Table 2.1
Objects of AT&L Goals and Subgoals Relevant to Services Acquisition

Goal No.	Object of Goal	Object of Subgoals ^a
1	Credibility and effectiveness of acquisition, logistics support	Acquisition cycle time, O&S cost, infrastructure cost, PBSC, competitive sourcing, customer satisfaction
2	Quality and morale of AT&L workforce	Requirements, experience levels, skill mix, [personnel displaced]
3	Health of defense industrial base	Competition, efficiency, [small and disadvantaged business]
4	Link between infrastructure and defense strategy	Management support for initiatives, [responsiveness, continuity]

^aThe bracketed items are subgoals not formally associated with the related goals by AT&L but nonetheless of importance to AT&L.

AT&L's first goal is to "achieve credibility and effectiveness in the acquisition and logistics support process."⁴ This goal addresses the performance of both the acquisition process itself and the services acquired through the process. The subgoals relevant to services acquisition focus on a variety of factors OSD believes are relevant to high-quality acquisition and logistics support. Shorter acquisition cycle time allows the provision of services to be more responsive to emerging needs and limits the surprises during an acquisition that can cause problems;⁵ lower operation and support (O&S) cost and infrastructure cost are desirable characteristics of an acquisition process and of acquired services. Performance-based services contracting (PBSC) is a formally defined form of DoD contracting that OSD believes improves the quality of services provided and reduces their cost.⁶ OMB Circular A-76 defines the competitive sourcing process that federal agencies use to decide whether to make or buy commercial-type serv-

⁴ OUSD (AT&L), 2001, p. 1.

⁵ This AT&L subgoal focuses on major acquisitions that are almost always larger than the service acquisitions we consider. Nonetheless, acquisition cycle time is relevant to the acquisitions we address as well. (This logic also applies to several other subgoals listed here.)

⁶ Office of Federal Procurement Policy (OFPP), 2003b.

ices;⁷ greater use of competitive sourcing supports President Bush's management agenda.⁸ Customer satisfaction is treated as the key to long-term profitability among commercial firms. DoD is giving it increasing attention, and it is especially important for services acquisition.⁹

As its second goal, AT&L seeks to "revitalize the quality and morale of the acquisition, technology, and logistics workforce."¹⁰ This goal focuses on the development, shaping, and sustainment of the personnel who work in DoD's acquisition, technology, and logistics activities. Strategic management of human capital supports the President's management agenda.¹¹ The subgoals here highlight factors relevant to services acquisition. Does DoD have the skill levels it requires? Will it continue to sustain appropriate skills as an increasing portion of the workforce retires and outsourcing removes skills from the federal workforce? Does DoD have the skill mix it needs? Can it sustain an appropriate skill mix as the technology DoD relies on becomes more sophisticated and DoD relies more heavily on commercial methods and on external sources for services? Does DoD have the skills required to manage increasingly large service acquisition programs? How does DoD adjust its skill mix to develop better strategic planning capability and devolve personnel management responsibilities to contractors?¹² A specific factor that AT&L does not formally include but that is proving to be critical in services acquisition is the question of what happens to government employees when a service acquisition displaces them, typically transforming them into employ-

⁷ Office of Management and Budget (OMB), 1999.

⁸ OMB, 2001b, pp. 17–19.

⁹ For example, defense logistics is increasingly emphasizing "perfect order fulfillment," which is simply a way of quantifying what a customer wants and then tracking execution against the customer's priorities.

¹⁰ OUSD (AT&L), 2001, p. 3.

¹¹ OMB, 2001b, pp. 12–16.

¹² Moore et al., 2002, addresses these issues in more detail.

ees of a private firm that provides the services they used to provide in-house.¹³

In its third goal, AT&L seeks to “improve the health of the defense industrial base.”¹⁴ It focuses on the continuing health of the private-sector industries that DoD draws on to acquire major weapons systems, other goods, and services. Our analysis focuses on service providers, a much broader set of firms than that traditionally included in the defense industrial base. The formal goals most relevant to services acquisition address competition and efficiency. Under the Competition in Contracting Act of 1984 (CICA), more full and open competition is a good thing because it promotes equity and transparency in acquisition and is generally expected to improve the quality and cost of services acquired.¹⁵ Greater efficiency in the industrial base is valued in its own right. AT&L highlights profit policy arrangements that share the benefits of efficiency goals with contractors; we think more broadly about ways to improve efficiency with win-win strategies that can simultaneously benefit DoD and private-sector providers. Our case studies suggest the importance of an additional subgoal here: DoD’s efforts to create opportunities for small and disadvantaged business.

In its fourth goal, AT&L seeks to “rationalize the weapons systems and infrastructure to defense strategy.”¹⁶ AT&L had not identified specific subgoals to associate with this goal in 2001, but a subgoal it includes for goal 2—management support for AT&L initiatives—fits more naturally here for services acquisition. Continuing leadership commitment is proving to be critical to the success of innovation in services acquisition. Earlier and more frequent leadership involvement in a service acquisition helps focus performance goals on the user’s strategic concerns rather than on the goals of

¹³ DoD addresses a number of the subgoals outside the specific purview of AT&L. For example, DoD places a high priority on small business goals even though they are not reflected in the specific goals and subgoals that AT&L has designed for its own use.

¹⁴ OUSD (AT&L), 2001, p. 4.

¹⁵ United States Code, Title 10, Sec. 2304; United States Code, Title 41, Sec. 253.

¹⁶ OUSD (AT&L), 2001, p. 5.

acquisition professionals in the functional organizations traditionally responsible for refining requirements and surveilling the quality of performance. Our case studies repeatedly emphasize two additional factors that fit comfortably here: responsiveness and continuity. Responsiveness is a strategic concern of particular interest to users. They typically prefer a provider that can respond to their needs as they arise over a provider that can execute a work scope defined in detail in the past. DoD buyers place a special premium on acquisitions that can enhance responsiveness without losing control or allowing cost to rise too high. Continuity of service from peacetime to wartime is another strategic concern of particular importance to users. Acquisitions that clearly spell out roles and responsibilities, define the terms of an agreement during a contingency, and provide for a smooth transition from peacetime to wartime address many of the risks that make users nervous about relying on external providers of services.

Basic Questions of Interest

Drawing on the objects of the OSD goals (see above) and on recent and ongoing RAND Corporation analyses of services acquisition,¹⁷ we identified a set of policy issues that our case studies should address and the data we should collect to address these issues. We then devised a questionnaire that we used to structure our interviews for the six case studies.¹⁸ The questions asked attempt to

- Summarize the basic facts about each acquisition. These facts trace the acquisition from initial requirements determination to

¹⁷ The best summaries of this work are in Anderson, 1999; Camm, 2002; and Moore et al., 2002. Moore et al., 2002, Appendix D, pp. 131-147, provides a detailed discussion of the kinds of methodological issues we have faced in the past and how we resolved them—a discussion that applies here as well. Ausink et al., 2001, uses a similar list and approach; also see Gansler, 2002.

¹⁸ We tailored the questionnaire to each acquisition to highlight relevant issues. We also used somewhat different questionnaires for users, acquisition professionals, and providers. Together, the questionnaires sought to cover the questions listed in the basic questionnaire, which is shown in Appendix A.

contract management and, where relevant, to a follow-on acquisition.

- Relate each acquisition to each buying organization's broader goals.
- Identify relevant dollar- and time-related costs and benefits associated with the acquisition process itself.
- Identify relevant costs and benefits expected to result from execution of the contract in each acquisition.
- Identify OSD's role in each acquisition.
- Identify how key aspects of recent and ongoing changes in DoD services acquisition policy have affected each acquisition.
- Identify where high-level concerns about small businesses, retention of key skills, balancing of control and innovation, etc., arose in each acquisition.

OSD reviewed the questions with us before we began and helped us refine their focus.

Choosing the Service Acquisitions

Our analysis used six case studies as a source of new data on how DoD acquires services. We used these cases to identify patterns across them that are likely to be relevant for more than just these cases—that is, for DoD as a whole. However, no matter how representative they might seem, six cases cannot produce findings with any meaningful statistical reliability. Rather, viewed in the broader context of ongoing services acquisition policy, they provide a basis for identifying insights worthy of further attention. We used them to identify working hypotheses that OSD can use to refine its understanding of services acquisition and to help focus its attention as it gains more experience with services acquisition.

Our case-selection process entailed two steps. In the first step, we worked with OSD to identify four cases that met the following criteria:

- Each is large, requiring some degree of program management on the government side that is not traditionally associated with services acquisition.
- Each tries one or more new acquisition techniques in its acquisition strategy, source selection, performance work statement, or performance management process.
- Each is generally regarded as a success in its acquisition experience to date.¹⁹
- Each is accessible to us as analysts.
- Together they span different parts of DoD.
- Together they span a wide range of service activities acquired by DoD.
- Together they raise thorny issues associated with limited competition, bundling, fenced government funds, and other issues that have complicated services acquisition in the past.

Based on our initial findings from these four cases, we worked with OSD to add two more cases that complemented the original four by

- Adding DoD organizations or service activities not covered, or
- Allowing a close comparison of two alternative approaches to a similar acquisition challenge.

Each case study began with a review of the secondary literature, operational information from the Web, and ongoing analysis at RAND. These sources helped us to identify relevant personnel to interview, to sharpen our questionnaire, and to focus our interviews on

¹⁹ Since we were interested in the potential offered by new approaches to services acquisition, best-in-class acquisitions were the obvious choice because they are the most likely to provide insights about that potential. New service acquisitions that have not turned out as well also deserve attention, but our focus was on acquisitions that succeeded in overcoming difficulties that other programs did not. Each of the programs reviewed encountered difficulties, which we address in our discussion of the case studies. These programs interested us precisely because they offer insights into how future programs can overcome similar difficulties.

issues of particular relevance to the case at hand. We spoke with acquisition professionals associated with each case and, where possible, with managers or executives from the providers and representatives of major users for the services in question. In each interview, we agreed not to associate individuals with their input to us and to protect sensitive information they provided. We collected information on these cases over the course of FY 2002; most of the information reported here is current as of summer 2002.

As we developed basic answers for our questions in each case, we synthesized case-specific information to develop generalizations across cases. As the work proceeded, we increasingly included these generalizations in our interviews, testing them by seeking reactions to them, and using the reactions to refine the generalizations over time.

Service Acquisitions Examined

Table 2.2 provides high-level information about the six cases we studied. This information and the following listed information show the range of buyers, service types, and acquisition sizes represented by these cases when they are examined together.²⁰

- The cases cover each of the armed services and a defense agency.
- The cases include single providers, teams of providers, and even multiple teams of providers, each with its own contract. In one case, one provider has two separate prime contracts.
- The cases include large and small providers. Most small providers serve as subcontractors on one of the teams in the sample, but some act as prime contractors that integrate and oversee the services of large and small subcontractors.
- The cases include some providers selected by competition, others selected as sole sources, and still others that continue to compete for work over the lives of the programs.

²⁰ Chapter Three discusses each case in detail; Appendices B through H provide still more details on the cases.

Table 2.2
Service Acquisitions Examined

Acquisition	Buyer/Seller	Services	Size/Date
Balkans Support Contract (BSC)	Army/Kellog Brown and Root (KBR)	Mainly commercial-type support services for deployed forces	\$2.1 billion over 1999–2004/ 5 years
Food Service	Marine Corps/Sodexo	Food service in all continental U.S. (CONUS) mess halls	\$881 million over 2002–2010/ 8 years
Groundbreaker	National Security Agency (NSA)/team of Computer Sciences Corp. and Logicon	Non-core information technology, services at agency headquarters	\$2.0 billion over 2001–2011/ 10 years
F/A-18-E/F Integrated Readiness Support Teaming (FIRST)	Navy/Boeing	Parts, maintenance, reliability, and maintainability improvements	\$770 million over 2001–2006/ 5 years
Rapid Response to Critical Systems Requirements (R2CSR)	Army/3 teams	Parts, maintenance, engineering services, etc.	\$5.4 billion over 1998–2003/ 5 years
Flexible Acquisition and Sustainment Tool (FAST)	Air Force/6 teams	Parts, maintenance, engineering services, etc.	\$7.4 billion over 2001–2008/ 7 years

- The cases include purely commercial activities, such as food service in CONUS, and services with no immediate commercial analog, such as the full support, in peacetime and wartime, of a weapon system that has just entered the operational force. Most cases have elements of both.
- The cases are all flexible in that they allow a great deal of variation in work scope over time. But this variation occurs within well-defined bounds for the FIRST, Groundbreaker, and Marine Corps food service programs, while it can vary widely from year to year for BSC, FAST, and R2CSR.
- The cases are all large for service contracts—large enough to raise issues of program management—but vary in length from 5 to 10 years. They also vary in the size of their ceiling for obliga-

tion authority, from \$700 million to over \$7 billion total and from \$110 million to over \$1 billion a year.

- Four of the cases involve very different kinds of services and use different acquisition mechanisms. Two—R2CSR and FAST—illustrate how two armed services approach very similar requirements.

Our goal in choosing these particular cases, with OSD's concurrence, was to achieve a wide degree of diversity so that we could examine as broad a range of new approaches to services acquisition as possible within a limited number of cases.

Preview of Findings

Table 2.3 summarizes the kinds of services acquisition policy issues addressed in the six cases we reviewed.²¹ As one looks across these service acquisitions, several general findings emerge.

The most important general finding may be that many ideas discussed during the 1990s and tested initially in larger system acquisitions are finding their way into services acquisitions. Each of the six cases highlights different new ideas, but three broad shifts occur almost everywhere:²²

- **Importance of program management.** The advent of large service acquisitions has increased the importance of program management. This change calls for different skills among relevant DoD acquisition professionals and a different kind of interaction between them and personnel in other DoD organizations.²³

²¹ Appendix A presents the full list of issues addressed in the interviews and data collection underlying each case study. Table 2.3 identifies the issues that stood out in the six cases we developed.

²² The row in Table 2.3 labeled "Innovative contract terms" reflects more-specific changes in individual contracts.

²³ The row in Table 2.3 labeled "DoD acquisition skills, processes" reflects this trend.

Table 2.3
Major Policy Issues Arising in Cases Studied

Policy Issue	Cases in Study ^a					
	BSC	Food Service	Ground-breaker	FIRST	R2CSR	FAST
Involvement of OSD, Congress	✓	✓	✓	✓	✓	✓
Lower acquisition costs, times					✓	✓
Needs of small, disadvantaged businesses		✓	✓		✓	✓
New forms of competition			✓		✓	✓
New forms of public-private coordination	✓	✓	✓	✓	✓	✓
Innovative contract terms	✓	✓	✓	✓	✓	✓
Delegation of authority to contractor	✓	✓	✓	✓	✓	✓
Dynamic military demands	✓	✓		✓		✓
Managing different types of funds	✓	✓		✓	✓	✓
DoD acquisition skills, processes	✓	✓	✓	✓	✓	✓

^aFull details are provided on the six cases, respectively, in Appendices C through H.

- Delegation of day-to-day management to contractor. The trend toward performance-based services acquisition (PBSA) shifts responsibility for day-to-day management from DoD to the contractor. DoD personnel then have an opportunity to think more strategically about how to link contract services to users' needs or to simplify the process users face to get access to contract services.²⁴

²⁴ The row in Table 2.3 labeled "Delegation of authority to contractor" reflects this trend.

- **Alternatives to arms-length relationships.** Traditionally structured, arms-length relationships between DoD and its providers are giving way to a variety of alternatives, some of which rely more heavily on public-private partnership and joint provision of services, while others allow greater use of competition by simplifying its application. This variety reflects an ability to use discretion to tailor FAR arrangements to users' needs rather than having to comply with a few tried and true standard operating procedures.²⁵

Some OSD policies clearly influence these patterns of change, but each of the case studies represents an example of a bottom-up effort to take advantage of new opportunities made available by acquisition reform. OSD efforts to promote acquisition reform made these changes possible, but none of them is best understood as a deliberate effort to comply with an OSD directive to pursue acquisition reform.

In several cases, it might be argued that the acquisitions were creative responses to OSD, administration, or congressional efforts to drive policies only tangentially related to the service activities addressed here. For example, high-level priorities favoring competitive sourcing or outsourcing probably helped promote interest in using contract sources. But no one had to develop the creative approaches to using contractors displayed here to comply with those priorities. Similarly, high-level support for applying manpower ceilings in theater increased attention to using contractors to support deployed forces; creative acquisition strategies made it much easier to use contractors in theater.

These cases suggest that a good way for OSD to approach continuing change in DoD services acquisition is to help the DoD components responsible for services acquisition pursue creative approaches that are compatible with OSD's broad acquisition goals for process transparency and integrity, support for small and disadvan-

²⁵ The row in Table 2.3 labeled "New forms of public-private coordination" reflects this trend.

taged business, and so on. When the cases were looked at from this perspective, several issues came up repeatedly:

1. The distance between deployed forces and support contractors is dropping for a variety of reasons.²⁶ Contingency operations now occur more frequently than they did in the past. Contractors play an increasingly important role in the support of new weapons systems, and evolutionary acquisition and spiral development will only accelerate this trend. Accumulating experience is increasing DoD's willingness to rely on contractors in theater. And greater reliance on "reach back," from the theater to support in the United States, opens new opportunities for contractors to support combat operations without facing the risks created by combat. Growing DoD use of contractors to support deployed forces will continue to raise issues about the attendant risks and acquisition practices to address these risks. In such a dynamic policy arena, OSD can verify that DoD use of contractors is compatible with DoD's strategic goals during contingencies. It might seem more natural to rely on combatant commanders or the Joint Staff to monitor this policy arena, but OSD retains primary responsibility for services acquisition policy in DoD.
2. As services acquisition becomes more creative, it will inevitably encounter policy barriers that could be removed to advance DoD's strategic goals. The relevant barriers exist because they were put in place to deal with other problems; a creative service acquisition can identify costs associated with these barriers that did not exist when the barriers were created. Two examples appear repeatedly in the study cases. One is the difficulty of giving service acquisitions credit for all small and disadvantaged businesses that benefit from these acquisitions.²⁷ Until OSD can help DoD components account for all the businesses benefited, unnecessary ten-

²⁶ The row in Table 2.3 labeled "Dynamic military demands" reflects this trend.

²⁷ The row in Table 2.3 labeled "Needs of small, disadvantaged businesses" reflects this trend.

sion will persist between those seeking new forms of acquisition and those primarily concerned about how DoD treats small and disadvantaged business. The other example is the set of difficulties that arises when an acquisition replaces a set of DoD activities funded by many different kinds of funds—many different “colors of money”—with an integrated contract in which one source provides all these activities without telling DoD how it does so—and hence what colors of money are needed for funding.²⁸ Individual cases provide details.

3. It is fairly easy to identify issues that will draw congressional attention if a service acquisition handles them the wrong way. When serious congressional interest arises, OSD inevitably becomes the intermediary between Congress and the service acquisition in question. The most persistent example in these cases is congressional concern about DoD’s treatment of small and disadvantaged business. Concerns about competition, outsourcing, and loss of control in flexible contract vehicles can also draw quick congressional attention. OSD can monitor how Congress reacts to service acquisitions to identify issues of high interest on an ongoing basis; these issues are likely to change as innovation in acquisition continues. OSD can monitor different DoD component approaches to high-risk congressional concerns, develop lessons learned on which work best, and provide a center of excellence on congressional concerns about service acquisitions to help the components devise better acquisitions. OSD can monitor service acquisitions in the components that are likely to attract congressional interest and verify that these acquisitions are doing all they can to avoid congressional problems. And if all efforts fail, OSD can maintain expertise on dealing with Congress to resolve problems with new service acquisitions in ways that promote DoD’s broad strategic goals—quickly if possible, but in a way that sets appropriate precedents for future DoD service acquisitions.²⁹

²⁸ The row in Table 2.3 labeled “Managing different types of funds” reflects this trend.

²⁹ The row in Table 4 labeled “Involvement of OSD, Congress” reflects this trend.

A Caveat Before Proceeding

As noted above, most of the service acquisitions studied here are fairly new. Four of the six began in 2001 or 2002; only the pre-award process is complete for all six. It will take time to determine how well these acquisitions work in practice.

Even for the two oldest acquisitions, the Army BSC and R2CSR programs, we have not attempted an independent, quantitative assessment of their performance to date. That would be beyond the capabilities of this study. GAO has raised concerns that the BSC program, as well as the program that it grew from, have not provided as much governmental control as they should have.³⁰ But placed in the context of the BSC as a whole, GAO's detailed audit found remarkably little to dislike. And Army acquisition professionals and users have been highly pleased by the contract, consistently giving the contractor high marks in the regular award fee process. R2CSR has not drawn any direct criticism. One of its strongest attributes is that it would terminate automatically if users did not continue to make heavy use of the program. Nothing requires users to access contractors through R2CSR; many alternatives are available. In the absence of our own independent audit, the evidence available to us indicates that BSC and R2CSR have been highly successful at achieving the strategic goals that led the Army to create both programs. Even if they can be improved, they have created more than enough value to justify their costs to the Army.

We cannot say as much about the execution of the other four acquisitions at this time. The flexibility built into each of them makes execution particularly important, and their success will depend heavily on how well they allow DoD to control outcomes relevant to DoD while still taking full advantage of the simplicity and innovative provider response that they promise today.

That said, we focus on observations about these acquisitions up to the point of contract award, using input from DoD users, DoD

³⁰ GAO, 1997 and 2000.

acquisition professionals, and contract providers to develop lessons learned about this portion of the acquisition process. We strongly endorse ongoing efforts to monitor these acquisitions to determine what portion of their promise they realize and to gather useful lessons learned for future DoD service acquisitions from the experience offered by their execution.

The Six Acquisitions Studied

This chapter consists of separate high-level summaries of the six service acquisitions we studied. For each acquisition, we provide background material, explaining why the relevant DoD component initiated the acquisition and describing what services are provided, and we highlight the key elements of the acquisition strategy used in each case.¹

Army Balkans Support Contract Program

The Army Balkans Support Contract (BSC) is the most recent in a series of three umbrella contractual vehicles that the Army has used to support forces deployed in the Balkans.² The Army began using its global Logistics Civil Augmentation Program (LOGCAP) in 1995 to support peacekeeping in the region. When the LOGCAP contract expired in 1997, the Army did not know how much longer it would remain in the Balkans. To ensure continuity of service while it remained there, the Army used a sole-source contract to continue to acquire support services in the region from the same contractor,

¹ Detailed references for the facts reported in this chapter for the six cases are in, respectively, Appendices C through H.

² Table 2.2 summarizes high-level facts about the program; Appendix C provides more detail.

Kellogg Brown and Root (KBR), a subsidiary of Halliburton.³ When it became clear that the Army would likely remain in the Balkans for a long period, the Army held a competitive source selection for support services, which KBR won, initiating the current BSC in 1999.

The Army uses a contractor to provide services in the Balkans for six reasons:

1. Army leadership wants to focus the attention of active military personnel on core military issues and to rely on contractors, with core competencies in support services, to ensure that the Army gets the support services it requires to achieve its core missions. In the Balkans, this means that the Army wants to delegate to the contractor as much responsibility as possible to design and execute the support service responsibilities there.
2. Circumstances in the region are secure enough to allow contractors rather than military personnel to provide services; contract provision allows the Army to apply its military personnel to more military-unique activities.
3. Troop ceilings in the theater and local sensitivities about an American military presence discourage the presence of U.S. military personnel and encourage the Army to use any who are present to perform activities that only military personnel can perform.
4. The Army made a decision in the 1970s to place many support activities like those provided through the BSC in its reserve components. Relying on KBR to provide these services allows the Army to avoid having to mobilize its reserve military personnel.
5. High operational tempo throughout DoD in recent years has tended to hurt retention of military personnel. Replacing military personnel in deployments to the Balkans with contract personnel reduces the stress that military personnel must endure in prolonged and repeated deployments.
6. American military units spend only six months in theater in the Balkans. Relying on a contractor that remains in theater provides

³ KBR was known as Brown and Root Services (BRS) at the time. For simplicity, we use the current name throughout this report.

stability and allows military units entering and leaving the theater to do so smoothly and seamlessly, despite their short tenures there.

The BSC provides a single entity the Army can hold accountable to design, execute, and integrate a wide variety of base operating support, life support, logistics, and other services in theater. The BSC provides stability that allows effective, long-term use of local employees and support capabilities. Such an arrangement allows military commanders in theater to focus their attention elsewhere. The Army is willing to pay a premium for such support as long as the warfighters get the support they expect in theater. Criticism from GAO has drawn attention to cost control, but the basic program continues to emphasize high-quality service and to delegate a high degree of responsibility to the contractor.

With these priorities in mind, the Army designed a best-value source selection for the BSC that gave high priority to past performance and to experience in providing the kinds of services provided for deployed forces in the Balkans. The BSC is a cost-plus-award-fee, indefinite delivery, indefinite quantity (IDIQ) contract that allows dramatic variation in workload over time and rapid contractor response to changes in requirements. The BSC is imbedded in a "habitual relationship" between KBR and relevant Army organizations that allows KBR to participate in Army planning, allows fairly free sharing of proprietary data, allows quick review and approval of KBR performance and cost proposals for new tasks, and provides an award fee process that encourages cost and performance improvements over time. KBR has gotten high marks in this process.

If the Army remains in the Balkans and so recompetes the BSC acquisition in 2004, KBR's performance until then will surely play a key role in the Army's decision about whether to extend its relationship with KBR in the Balkans or to choose an alternative provider. Through the BSC and the relationship in which it operates, the Army can devolve a great deal of responsibility to KBR while retaining enough visibility over KBR activities to intervene if problems arise.

The Army has rarely found reason to intervene. That is how the contract and broader relationship are designed to work.

The fact that the Army has used three separate contracts over time to define its relationship with KBR in the Balkans illustrates that this acquisition is about a great deal more than the current contract. The Army has progressively broadened KBR's responsibilities in theater as the Army's role in the Balkans has matured. And each new deploying unit asks for adjustments. Hundreds of contract changes have occurred over the life of the current contract alone. The BSC and its predecessors have supported an exceptionally close relationship that allows the Army to get the support it wants without committing too much of its leadership's time to figuring out what it needs. And relying on a contractor in theater has improved the Army's ability to withdraw military personnel over time.

Marine Corps Food Service Program

The Marine Corps initially considered outsourcing services provided by military personnel and consolidating its contracts for mess hall services as a way to cut costs, to include reductions in military endstrength.⁴ As the acquisition went forward, the senior Marine leadership realized that reducing military endstrength should not be a goal of this program.⁵ Like much of the rest of DoD at the time, the Marine Corps was becoming more concerned about using the military endstrength it had in the best way possible and less concerned about cutting operating costs. As a result, the primary motivation behind the acquisition shifted from the savings that would be realized by reducing Corps endstrength by 594 Marines, to the benefits that would be realized by retaining those Marines and realigning them into more critically needed specialties at no additional cost. The

⁴ Table 2.2 summarizes high-level facts about this program; Appendix D provides more detail.

⁵ This acquisition did not involve a formal public-private competition, because it did not affect enough government civilian billets to trigger such a competition.

Marine Corps came to see this acquisition as part of a broader effort to replace military personnel with contractor personnel and to use the cost savings expected from using contract support to help pay for the additional personnel that would be required to provide contract support. In the end, this effort was expected to allow the Marine Corps to divert about 600 Marines from food services to more critical military activities.

The Marine Corps wanted a provider that could cut costs while keeping quality high enough to maintain the morale of Marines who relied on the mess halls. Market research convinced the Marine Corps that a regionalized approach could achieve what it wanted. It defined the requirements on a regional basis—one comprising mess halls on the east coast, the other comprising mess halls on the west coast—and held a separate competition for each regional requirement. Because mess halls are a traditional place where the DoD uses small and disadvantaged providers, the Marine Corps consulted early with advocates for these providers. Drawing on the successful resolution of these issues that had recently occurred in the Navy Marine Corps Intranet (NMCI) program, the Marine Corps developed a requirement that small business contractors receive 30 percent of the business associated with each contract.

Marine Corps market research revealed a set of best commercial practices for food service. It adopted those that could be accommodated easily, such as (1) bundling regionally, (2) basing price on number of meals served to encourage the provider to sustain food quality, and (3) keeping buyer control over the menu, but allowing the provider to adjust recipes to its preferred cooking technology. The Marine Corps prescribed an eight-year-long contract to encourage providers to invest in new facilities to support the contract and included cancellation terms to protect a portion of a new investment. It did not dictate specifically how food services would be provided, but used its market research to help judge the reasonableness of proposals, which provided details on methods and costs.

The Marine Corps did, however, retain the traditional practice of buying material inputs to food preparation through the Defense

Logistics Agency (DLA). Commercial food service providers typically include volume food purchasing as an integral part of their service.

Best-value competitions for each contract gave highest priority to the level and reasonableness of cost and also addressed the small business plan, among other factors. One of these other factors was past performance, but the Marine Corps gave this low priority, in part because no one had ever attempted to provide food service on the scale contemplated in this acquisition.

Sodexho won both competitions based on separate proposals; it met Marine Corps needs in different ways tailored to its capabilities in the two different regions. Protests in these competitions delayed final award for 16 months and imposed substantial costs on the Marine Corps and on Sodexho. The performance-based approach to acquisition created uncertainties about how best to judge the reasonableness and realism of costs and required some reconsideration of offers before Sodexho was certified as the winner. Additional concerns with less apparent merit accounted for a considerable portion of the delay. Because protests and delays of this kind would not have occurred in a pure commercial setting, they probably set a bad example for the best-of-breed providers the Marine Corps sought and will seek in future service acquisitions.

The contracts allow the Marine Corps to

1. Place Marine food service specialists in mess halls run by the contractor, so that they can acquire and sustain food service skills.
2. Withdraw these Marines on short notice for deployment as needed.

This allows the Marines to increase their peacetime reliance on contractors without losing their ability to project force with military personnel in contingencies. The contract requires the provider to sustain mess-hall services without interruption when Marines leave and allows equitable adjustment for any costs incurred to do this. Sodexho anticipates no serious costs, because it is such a large presence in the American food industry, the number of billets involved is so small relative to its size, and it is used to modulating workload quickly at

individual sites. Sodexho integrates Marines “in training” with its own personnel and subcontractor personnel in closely managed teams at each location, a practice it uses successfully to serve other customers at other locations.

National Security Agency Groundbreaker Program

In the late 1990s, the National Security Agency (NSA) was under heavy pressure from Congress and OSD to improve its internal management. This acquisition represents one of NSA’s initiatives to address that concern.⁶ Although NSA maintains one of the most sophisticated technological cultures and capabilities in the federal government, it found that it could not keep up with the rapid advance of information technology and services relevant to the support of its non-core mission—the support of information and communications systems used in the administrative and office activities of the agency that typify information services in most large service organizations. It wanted to focus its leadership’s attention on updating its technology and other capabilities relevant to its high-security, core missions. The growing success of third-party providers in the commercial information services market suggested that a third-party solution might be appropriate for NSA.

NSA executed a 15-month feasibility study, with the support of Booz Allen Hamilton and PEC Solutions, to scope the problem and develop an effective acquisition approach. NSA identified four areas suitable for third-party provision in NSA’s headquarters: distributed computing, networks, telephony, and enterprise management. The Groundbreaker acquisition itself then sought to develop such third-party provision through a single source. This outsourcing approach would integrate many services already provided by over 1,000 government civilians, military personnel, and contract employees. NSA argued successfully that this Groundbreaker program was not simply

⁶ Table 2.2 summarizes high-level facts about the program; Appendix E provides more detail.

outsourcing a given workload. Rather, NSA was so radically restructuring the provision of information services that Groundbreaker could be characterized as a new program and thus not subject to a formal public-private competition under OMB Circular A-76.

NSA works in a highly secure environment that requires any contractors to have personnel and facilities with hard-to-obtain security clearances. To minimize any difficulties or delays that might come from securing such clearances for providers, NSA limited its search to contractors who had worked with NSA in the past and were capable of providing large-scale information technology services. Its analysis indicated that these providers could assemble teams to provide all the services it required and then compete with one another for the workload. NSA also wanted to retain access to as many cleared NSA employees as it could following the outsourcing, so it structured the acquisition to retain these personnel in the contractors that would serve NSA in the future.

NSA worked with potential offerors for 18 months, sharing detailed information about its information service requirements and working out the details of a final request for proposal (RFP). That RFP called for a flexible pricing approach designed to acquire the current volume of services needed while accommodating future growth or reductions through the use of fixed resource unit price bands. The price would depend heavily on two factors. The first was a benchmark of the price paid to third-party providers for similar services elsewhere over the life of the contract. NSA would pay a price linked to the benchmark price for the provider at the top of the first quartile for all costs per seat surveyed.⁷ The second was an adjustment factor that reflected an offeror's determination of how much over this benchmark it expected the work at NSA to cost given the special demands of the organization. The actual price would then reflect the benchmark, determined periodically by a third-party auditor, adjusted up by the adjustment factor offered by the winner of the competition. Meanwhile, the provider was also expected to provide a level

⁷ That is, 25 percent of the providers in the survey would have lower costs per seat than this benchmark.

of quality compatible with that in the top quartile of the benchmark survey group. Based on this pricing and quality assurance plan and their extensive reviews of NSA's requirements, the competing teams developed technical and management plans, which NSA reviewed in a best-value competition.

The Eagle Alliance team, led by Computer Sciences Corporation (CSC) and Logicon, a division of Northrop Grumman, won this competition in 2001. It is now responsible for updating or replacing all equipment relevant to the services covered and providing support services in exchange for the price described above. It is also responsible for continuing to upgrade NSA's capabilities as technology advances. NSA continues to state its requirements; the Eagle Alliance then translates these requirements into specific goods and services that it pays for. To ensure that the new contractor has effective authority to make the right choices for NSA as a whole, the NSA acquisition office requires that all requests for new services or equipment go through the contractor, which in effect is the monopoly provider of these services to the NSA headquarters.

The Eagle Alliance offered displaced NSA employees large bonuses to move to the contractors in the alliance. Because third-party information service is a growing market, the contractors were able to offer these workers opportunities not only at NSA, but also in other locations they are developing. That said, the employees' high security clearances and special knowledge of NSA make them particularly valuable in the Groundbreaker contract itself.

Even though the current contract focuses on the NSA headquarters, NSA may seek similar arrangements for information services elsewhere if the arrangement works as well as expected. The Eagle Alliance initially hoped such expansion could occur through the context of this contract. NSA has made it clear that it would prefer a follow-on competition to maintain an appropriate degree of competition in the program.

The dramatic devolution of responsibility to an external party, shift in the status of valuable employees, and new central control over the availability of external services to user organizations in NSA require close coordination among the NSA leadership, its acquisition

office, and the user organizations affected. These all represent marked departures from NSA's previous approach to business. NSA achieved this coordination to complete the contract award. It will be a challenge to sustain it through the 10-year life of the contract.

NSA has taken a proactive stance with respect to OSD. It invited OSD to participate in information updates throughout the acquisition process and pushed information to OSD to keep it informed. OSD responded by giving NSA the freedom to proceed.

F/A-18-E/F Integrated Readiness Support Team Program

In the mid-1990s, OSD was seeking ways to apply best practices to logistics support. The acquisition and operational support organizations associated with the F/A-18-E/F, then in development, saw in this aircraft an opportunity to attempt something fundamentally new in logistics support. A Navy-commissioned Boeing study provided the basis for a series of discussions on this topic. The discussions concluded that the Navy could cut costs relative to baseline costs under a traditional support approach by engaging Boeing in a close partnership that drew on both Navy and Boeing logistics capabilities, gave Boeing better information on the Navy's activities and priorities, and gave Boeing more freedom to act on this information to the mutual benefit of buyer and seller. The F/A-18-E/F Integrated Readiness Support Team (FIRST) program is the product of a four-year effort by Boeing and the Navy to design a governance structure in which to seek mutual benefits.⁸

FIRST covers support of parts unique to the F/A-18-E/F. If it works as hoped, it will provide the foundation for an agreement to include all parts on the F/A-18-E/F and perhaps other, earlier versions of the F-18. In effect, FIRST uses logistics metrics normally used to judge the performance of organic support of aircraft components to measure the quality of Boeing's support of the F/A-18-E/F

⁸ Table 2.2 summarizes high-level facts about the program; Appendix F provides more detail.

fleet. This hews as closely as possible to the general goal in performance-based contracting of using the buyer's requirements documents to define the contractor's performance goals. FIRST then gives Boeing the right to change the configuration of relevant components in the F/A-18-E/F and the support process for them in ways that improve reliability and maintainability (R&M) without degrading safety or military capability. FIRST includes an information loop to give Boeing operational data it can apply in a formal maturation program to improve R&M. Starting with some Navy seed money, Boeing will pay for such changes and retain savings realized from improved logistics supportability. Boeing also integrates logistics support for relevant parts of the F/A-18-E/F, including depot-level support provided through a Navy depot. Boeing coordinates this depot work through a public-private partnership agreement with the Navy.⁹ The Navy pays Boeing a price based mainly on cost at the beginning of the contract, and then increasingly on a fixed-price-incentive arrangement over time. The fixed target price is to be negotiated based on shared information and priorities. The contract includes terms to adjust the price and performance targets to reflect surprises, such as changes in fielding plans, operational flying plans, or contingency operations.

Past efforts in DoD to apply what is in effect a fleet performance warranty have faltered as a result of the uncertainty that inevitably accompanies the operation of high-performance defense systems that have not yet been matured and the finger-pointing that inevitably follows disagreements about who is responsible for specific failures.¹⁰ To succeed, a close teaming arrangement like that described above must include precise definition of roles and responsibilities, timely and accurate exchange in information, and mutual trust. Mutual trust can be sustained only by cumulative success from the perspective of both the buyer and seller and a lot of effort taken on both sides to feed the relationship itself. During the design period, Boeing and the

⁹ United States Code, Title 10, Sec. 2563, provides the authorization for this partnership. For details, see Hunter, n.d.

¹⁰ See, for example, Kuenne, Richanbach, and Riddell, 1988.

Navy maintained a stable core negotiating group. This allowed senior personnel on both sides to establish mutual trust based on personal relationships. Professional facilitators supported the effort throughout to encourage effective, focused communication.

Boeing and the Navy attempted this arrangement only after integrated process teams (IPTs), staffed by Navy and Boeing personnel, spent four years defining all aspects of the partnership. Boeing and the Navy had learned how to use such “joint” teams in test programs to eliminate redundant test actions and speed development. The FIRST teams painstakingly mapped each process relevant to F/A-18-E/F support and identified who was responsible for each action, decision, information flow, and financial flow in each process. This effort in itself clarified the support process in ways that would have improved support for the aircraft even in the absence of this agreement. But the agreement could not succeed from both Boeing’s and the Navy’s perspective without the effort. Boeing’s responsibility for the performance of Navy depots may pose the most serious challenge in the agreement. DoD efforts to assign total system support responsibility (TSSR) to a contractor when a government organization retains important support responsibilities typically use performance metrics that hold the contractor harmless for failures of the government support activity.¹¹ For example, a contractor’s component repair cycle time could be adjusted if the government failed to deliver subcomponents from its supply system as agreed; the contractor’s measured cycle would not include time awaiting parts from the government supply system. The FIRST contract is not written this way. Boeing’s control over performance at Navy depots is limited. The success of the program will depend critically on the ability of buyer and seller to fulfill their respective responsibilities.

¹¹ The agreement between Northrop Grumman and the Air Force (Contract F09603-00-D-0210) for total system support of the Joint Surveillance and Target Attack Radar System (JSTARS), another complex, new weapon system, offers a useful contrast. The JSTARS agreement carefully delineates roles and responsibilities and holds the contractor accountable only for things it can control directly. See Griffin, n.d.

Army Rapid Response to Critical Systems Requirements Program

When a federal government organization needs a contractor to provide engineering services or manufacturing support to sustain older weapon platforms or communications, electronic warfare, and information systems, it can bring its certified requirements and its authority to spend to the Army's Rapid Response to Critical Systems Requirements (R2CSR) program.¹² The R2CSR program office has formal processes and expertise to link these organizations with private firms that can meet their requirements, quickly and with limited administrative burden. In effect, R2CSR stands ready to help any federal government organization develop formal contractual relationships with the companies that participate in the program. It charges a modest fee for this service and uses the funds received to cover its costs. Because many mechanisms exist to do these kinds of things, the best measures of the success of the R2CSR program are the extents to which users choose it over the alternatives and return as repeat users.

In 1998, the Army held a best-value competition and chose three teams of firms that would be allowed to participate in this program. This initial competition elicited cost factors that these teams could apply in further competitions for delivery orders held as an integral part of the program.¹³ To participate, a firm had to stand ready to receive an RFP for a delivery order at any time, develop a proposal within seven days, wait for the user to spend days reviewing proposals, and then, if it won the competition for the delivery order, begin to execute the proposal within 21 days of the proposal. Once work begins, the user has primary responsibility for assuring quality.

ARINC, Lear Siegler Services, Inc., and Lockheed Martin head the three teams chosen. These prime contractors have individual con-

¹² Table 2.2 summarizes high-level facts about this program; Appendix G provides more detail.

¹³ Actually, each team could offer and often has offered more favorable terms in subsequent competitions than were offered in the initial competition. Teams are required to offer terms no worse than the initial factors.

tract ceilings under the program. They have had 22 to 24, 22, and 16 to 20 team members, respectively, which in turn often employ additional companies as subcontractors. Actual numbers of members have varied during the program, reflecting changes in program priorities and the interests and performance of the member firms. The prime contractors and their team members typically have good working relationships with potential government users and work closely with them to use the R2CSR to place new work on contract. But, with some carefully defined exceptions allowed under standard government procurement regulations, they always use R2CSR competitions to place new work on contract under this program.

In effect, this program uses two rounds of competition to introduce discipline into the market for government services. The first round qualifies a limited number of providers and defines the terms they are to use in the second round of competitions. The second round allows each of the teams to make offers for any work addressed through the program. The quick turn-times for the second round of competition favor competitors that stand ready when an RFP arrives; these competitors often have been the first to suggest the work to a potential government user and have pointed the potential user to this vehicle to place the work on contract. But each of the teams maintains databases to link proposals to potential providers not involved early. These potential providers can be aggressive competitors; their mere presence imposes discipline on offers made by firms that enter a particular competition with a serious head start.

Because the R2CSR program is self-financing, it remains in business only as long as it provides value to potential users. Several considerations have proven to be particularly important to that success, including the following: (1) R2CSR maintains a capable staff and increasingly sophisticated information systems that facilitate reliable information exchange and give users support in learning how to use the system effectively. (2) R2CSR offers a broad range of contract and competition types for delivery orders. (3) Even though the R2CSR office handles the administrative details of each delivery order to ensure compliance with the terms of the R2CSR program and government procurement regulations more broadly, it still gives users

broad authority to define work scope, to define factors relevant to choosing a source, to define contract terms, and to assure quality in work delivered. (4) R2CSR offers these services at a modest cost but collects sufficient revenues to continue adding capabilities that improve the service it provides to its users.

Any program of this type and size raises questions about the treatment of small and disadvantaged businesses. Setting and meeting acceptable goals for using small and disadvantaged businesses has been the biggest challenge for R2CSR. R2CSR requires that small businesses receive at least 20 percent of its revenue, disadvantaged businesses, at least 5 percent. One team had initial difficulty meeting these targets but quickly learned how to do so when the R2CSR program office made it a priority. The R2CSR and team program offices are now aggressive about identifying how much revenue goes to small and disadvantaged businesses as primes, team members, and subcontractors. They keep the advocates for these groups informed about program performance.

This program grew from the Army Communications and Electronics Command's (CECOM's) earlier successful experience with a similar program, the Low-Tech Omnibus program, on which Lear Siegler Services, Inc., was the incumbent. Many other programs of this type have grown up in various places. The best known are probably the multiple award schedules (MASs) that the General Services Administration (GSA) maintains. In 1999, Air Force market research concluded that R2CSR was the best in class for users seeking services relevant to the support of weapons systems. The Army plans to extend this program with a follow-on, the Rapid Response (R2) program, which will cover an even broader array of potential goods and services. Serious acquisition planning for that program was under way in 2002. The Air Force's experience with small and disadvantaged businesses in its FAST acquisition (described next) convinced the Army to increase opportunities for small and disadvantaged businesses in this new acquisition.

Air Force Flexible Acquisition and Sustainment Tool

In the late 1990s, Air Force system program offices made heavy use of the Army's R2CSR program to acquire engineering support and manufacturing services. They liked the quality of service that the R2CSR program provided but resented having to use military inter-departmental purchase requests (MIPRs) that in effect used Air Force funds to pay for Army manpower positions. The Flexible Acquisition and Sustainment Tool (FAST) is the ultimate product of the Air Force's efforts to create its own vehicle for producing multiple-award contracts for broad based acquisition and sustainment support and thereby keep Air Force funds within the Air Force.¹⁴ It expected cost to the Air Force to fall a bit and hoped for some performance improvements in purchases through the program of weapon system sustainment; engineering services, logistics; manufacturing support; financial management; deployment support; spare parts contingency planning; system, subsystem, and component repair; parts manufacturing and installation; and technology insertion.

To begin its acquisition planning, the Air Force conducted extensive market research and held discussions with potential providers on the kinds of services Air Force centers would need in the future and on the characteristics of programs such as R2CSR that might serve as models for an Air Force program. One piece of research indicated that the size of the Air Force market for such services could be on the order of a billion a year over seven years, which formed the basis for the new program's ceiling. Another element of market research identified a wide range of programs, compared them against a set of evaluation criteria, and then considered a variety of hybrids based on these programs. This analysis revealed that the best option for the Air Force would be to initiate its own version of the R2CSR program, adjusted to take advantage of lessons learned from the market research. Three adjustments were particularly important: (1) the

¹⁴ Table 2.2 summarizes high-level facts about this program; Appendix H provides more detail.

Air Force would include only Air Force users in its program,¹⁵ (2) it would offer this service to its users free of charge, and (3) it would set even more demanding targets for cycle time, holding the time allowed to respond to an RFP at seven days but reducing the time from proposal to execution from 21 to 19 days.¹⁶ This reduction was based on the fact that Air Force advances in Internet use were being made while the FAST program was under development.

Otherwise, the program was meant to be more similar to than different from the Army R2CSR program. It would use a best-value competition that emphasized past performance to prequalify teams that could then compete for the right to fill specific delivery orders. Delivery orders could use a wide variety of contract types and terms and competition arrangements. The initial acquisition plan anticipated setting aside one prime contractor award for a small business and choosing other primes in an unrestricted competition.

As the effort to put this new program in place proceeded, a protest to GAO and complaints from small Air Force contractors that were excluded from this acquisition induced congressional advocates of small and disadvantaged businesses to raise concerns about the FAST program. Congress requested data on how the program would affect small and disadvantaged businesses and on documentation of savings to justify the bundling implicit in the program. Other protests followed. The FAST program agreed to treat small and disadvantaged businesses more favorably. But the FAST program had to withstand what were in effect three legal challenges before it could

¹⁵ Other agencies can use the FAST contract if their requirement is in direct support of the Air Force and the agency can find an Air Force sponsor for the requirement at an air logistics center (ALC). The order for the requirement is placed at one of the ALCs, which places the order only if it can determine that the requirement is in direct support of Air Force missions or that its support is in the Air Force's best interest. Joint service programs offer a good example of this. For example, the Navy is the lead, or executive, service for the AIM-9 Sidewinder missile program, but the Air Force is the largest user of the assets. Supporting the Navy for an AIM-9 requirement would ultimately lead to direct support to the Air Force.

¹⁶ The 19 days is the goal for average orders; more-complex modification programs could take longer. In many cases, the 19 days can stretch to 50 days for orders valued at \$50M or more.

proceed. OSD became entangled in these contretemps but was not well situated to help resolve them.

The acquisition strategy anticipated awarding up to four contracts through full and open competition and reserved two awards for small business. Fifteen percent of all monies going to FAST primes would go to the collective small business primes. The source selection in fact yielded three large (Boeing, Lockheed Martin, and Scientific Applications International Corporation) and three small (Modern Technologies Corporation, Support Systems Associates, Inc., and Technical and Management Corporation) primes with 136 subcontractors that were small businesses.¹⁷ These adjustments demonstrated Congress's interest in this topic and its ability to shape DoD policy. In effect, the adjustments became the baseline for future discussions between DoD agencies and Congress on this topic.

The FAST program used resources donated by each of the logistics centers to help run its source selection. Each center has dedicated people to work the post-award of the contract or manage the placement of orders at the center.

The Air Force initially expected to offer the FAST program as one option for the centers and to rely on the absence of fees to help sell the program. Later, the Air Force became more aggressive about encouraging use of the program. Early users of the program are happy with its performance to date. The program only began in 2001; time will tell how its use and the competitions within it proceed.

¹⁷ Modern Technologies Corporation won its award in a full and open competition.

Primary Policy Issues in the Acquisitions Studied

This chapter discusses policy issues that run through the six service acquisitions studied. We begin by addressing the goals relevant to the acquisitions, including those pertaining to operational outcomes in DoD, to the treatment of small and disadvantaged business, to the application of manpower and personnel ceilings, and to the choice between contract and organic provision of services. We then focus on the factors that arise in the course of an acquisition: public-private interaction before and after source selection, source selection itself, the design of performance-based arrangements, and simplified oversight in an increasingly dynamic environment. Finally, we look at the factors affecting the acquisition workforce, broadly defined.

We draw on our descriptions of the six case studies (see Chapter Three) to illustrate elements of each policy issue, placing the experiences of those cases in the broader context of ongoing commercial and federal practice. In discussing each issue, our objective is to elicit specific lessons likely to be relevant to OSD.

Wide Variety of Policy Goals

To determine how successful these service acquisitions are, one must determine first what they are trying to do. DoD acquisition of services has traditionally emphasized cost reduction. Congress, for example, requires that DoD use dollar cost as the only criterion of choice

in public-private competitions.¹ Perhaps the single most important lesson of these case studies is that cost is not the only factor that DoD organizations have emphasized in recent large service acquisitions. Although we did not select our case studies for this purpose, they do illustrate well the diversity of goals associated with DoD services acquisition.

These case studies focus on improving either (1) the quality and cost of the services purchased, or (2) the quality and cost of the acquisition process itself. Improvements in the quality and cost of the services purchased are likely to account for the largest net benefits to DoD from improved services acquisition. But improvements in the service acquisition process itself can be important as well.

Services Purchased

The factors we considered relevant to improving the purchase of services purchased were as follows:

Flexibility. All of the programs seek more flexible ways to proceed in an uncertain environment. None sought to define a specific work scope and execute that over a period of years. Groundbreaker is a direct response to NSA's inability to keep up with its own needs in an uncertain market environment. BSC, FAST, and R2CSR, which all use IDIQ contract vehicles with broadly defined work scopes, are built first and foremost to be flexible. FAST, FIRST, and the Marine Corps food service program plan explicitly for deployments, and FIRST ensures tight integration to allow timely information exchange and provider response.

Cost and quality improvement. The case studies treat improvements in cost and quality quite differently. FIRST and Groundbreaker seek dollar cost reductions directly. The Army did not initiate BSC to cut costs, but external pressure has forced the Army to raise the importance of cost in the program. The Marine Corps food service program started with a focus on dollars but quickly shifted to a focus on a different cost—that of “wasting” some of its fixed military

¹ United States Code, Title 10, Secs. 2461 and 2462 require this. For a discussion of this issue, see U.S. Department of Defense, 2003a, Sec. 405 and pp. 107–108.

endstrength in nonmilitary jobs when Marines were needed elsewhere.

FIRST uses metrics that build in expectations of improved performance. Groundbreaker expects improved performance as its provider updates its systems and depends on benchmarking to set goals. The Marine Corps food service program seeks to reward performance by paying Sodexho to attract more customers to the mess halls. BSC rewards high-quality performance in its award-fee process and has been criticized for inducing a level of quality that is not cost-effective (that is, of “goldplating”) through its (deliberate) limitations on day-to-day Army oversight of the program.

Leadership focus. The developers of BSC and Groundbreaker were quite explicit about trying to “get out of the business” of providing certain non-core activities. By handing primary responsibility for structuring these activities to a contractor, these programs allow defense leaders to focus on their core concerns. FIRST is less direct, but it clearly intends to give Boeing authority that the Navy had traditionally retained in-house. The Marine Corps food service program also helps Marine leadership de-emphasize food services by helping get Marines out of its provision.²

Access to commercial capabilities. FIRST, Groundbreaker, and the Marine Corps food service program are explicit about seeking better access to commercial technology and methods. BSC implicitly hopes that this will occur but does not highlight it. Better access to commercial capabilities can help DoD in two different ways. Most directly, it provides technologies and methods not readily available within DoD. More generally, it attracts more and better providers to the defense market and thereby improves the quality of competition

² Although more and more attention is being paid to improved leadership focus in public- and private-sector services acquisition, some question whether it is a legitimate goal, on a par with flexibility, cost, and quality. Buyers seek acquisition solutions that improve the focus of their leaders in order to improve levels of flexibility, cost, and quality in their organizations as a whole, not in any particular service being acquired. In the context of a single service acquisition, improved leadership focus serves as a useful surrogate for broader organizational goals associated with flexibility, cost, quality, and so on.

for DoD business. In our sample, DoD acquisitions heavily emphasize the first benefit of commercial access over the second.³

Acquisition Processes

Most obviously, FAST uses a performance metric that builds in an expectation of improved performance in services acquisition. Those associated with R2CSR recognize that it can succeed only by achieving and sustaining improvements in the acquisition services it provides and requiring it to earn its own funding induces such an outcome. The BSC and FIRST programs allow buyers to devolve many acquisition responsibilities to contractors and to retain control through a single, integrated point of contact. Although FAST and R2CSR do not appear to have been designed to do this, they do appear to do it to some degree in that they devolve significant integration responsibilities to the program offices of the provider teams. Groundbreaker may achieve improvements in purchasing by centralizing this function in the contractor organization, but this possibility is not the reason that NSA chose to pursue the program.

OSD's Role

AT&L's goals and subgoals capture significant elements of the goals identified here—for example, cycle time, cost, and customer satisfaction. In that sense, broadly speaking, these goals tend to be consistent with AT&L's goals. Acquisitions such as those we reviewed are likely to promote AT&L's broad strategic goals, but in ways that would be difficult to quantify for specific acquisitions.

That said, AT&L's formal goals do not appear to place as much emphasis as our cases do on the demand for flexibility and respon-

³ Improved access to specialized commercial capabilities is also getting attention in public- and private-sector services acquisition, and it, too, is seen by some as not equal to flexibility, cost, and quality. Acquisition solutions that improve buyers' access to cutting-edge capabilities are thought to improve longer-term levels of flexibility, cost, and quality. Even if these effects cannot be measured when the user-provider relationship begins, experience indicates that providers with cutting-edge commercial capabilities can bring benefits over the longer term in appropriate relationships. Looking at the prospects for a long-term relationship based on the data at hand, improved access to commercial capabilities serves as a useful surrogate for longer-term organizational goals associated with flexibility, cost, quality, and so on.

siveness and the desire to focus leadership attention on core issues.⁴ AT&L pays more attention to cost reduction than our cases do. And while AT&L promotes competitive sourcing, we found it to be unusual in our small sample. In fact, requiring competitive sourcing would probably have prevented the realization of many of the benefits identified with the goals listed here because it would have forced the primary emphasis to be on cost goals.

Translating OSD's strategic goals into metrics that can be applied to assess individual service acquisitions appears to be a challenge that deserves additional attention. Two issues are especially important.

First, flexibility, cycle times, and total ownership costs are clearly important outcomes to DoD leaders,⁵ but they are often hard to measure. Use of competitive sourcing and PBSA processes is much easier to measure, but these processes need not yield the tangible, positive outcomes that DoD cares about strategically. How should OSD integrate its oversight of goals of such qualitatively different characters?

Second, how should DoD trade off among its various goals? For example, in a particular acquisition, AT&L's goals indicate that DoD should seek lower costs and shorter cycle times. Which is more important? How much extra should the acquisition be willing to pay for greater flexibility? The NDAA for FY 2002 gives much greater priority to cost than to any other goal; such an emphasis will degrade military capability if enforced in individual service acquisitions. OSD needs to develop a coherent approach to trade-offs among the goals

⁴ DoD's new 5000 Defense Acquisition Policy documents, issued on 12 May 2003, do emphasize flexibility and responsiveness. AT&L's strategic goals need to reflect this new emphasis. For details, see the DoD 5000 Website at <http://dod5000.dau.mil>.

⁵ At the highest levels in DoD, the desirability of flexibility underlies the ongoing shift in defense guidance away from a scenario focus to a capability focus. The secretary of defense has repeatedly emphasized the need to dramatically reduce cycle times for all processes in DoD. And despite recent increases in defense spending, operational capabilities remain unfunded in DoD. DoD continues to seek cost savings, especially in institutional activities where services acquisition plays a large role, to cover shortfalls in operational capabilities. To be useful, such cost savings must address total ownership costs, even though these are often hard to measure.

that it identifies. Without such an approach, a future service acquisition could easily appear to be pursuing AT&L's goals aggressively—for example, using competitive sourcing to lower costs and improve competition among private-sector providers to DoD—even as it degraded DoD's military capability.⁶

Treatment of Small and Disadvantaged Businesses

Concerns about the treatment of small business came up repeatedly in our case studies. Congress has demonstrated a strong interest in ensuring that small and disadvantaged businesses have access to government contracts, preferably as prime contractors. Often following the lead of best commercial practice, DoD's service acquisitions increasingly "bundle" activities previously provided by small firms by combining their work scopes into source selections for single prime contractors with DoD. The Small Business Reauthorization Act of 1997 (SBRA)⁷ limited DoD's ability to do this by requiring that before bundling contracts, DoD must demonstrate measurably substantial benefits. The act discourages reliance on cost savings that result solely from administrative simplification; savings should come from improved delivery of services, not from simplified administration of the services inside the government. Even if DoD can justify bundling under these terms, it must also specify actions designed to support small business participation as subcontractors.

Among the acquisitions we reviewed, small business concerns were strongest in the FAST, Marine Corps food service, and R2CSR programs.⁸ All three programs paid significant attention to small

⁶ As noted above, DoD's new 5000 Defense Acquisition Policy documents capture this diversity more effectively than the NDAA for FY 2002.

⁷ P.L. 105-135.

⁸ The House Small Business Committee highlighted two of the acquisitions reviewed here on its list of the top ten recent service acquisitions raising concerns about bundling that eliminates opportunities for small businesses to be prime government contractors. See House Small Business Committee Democrats, 2002.

business issues from the start of their acquisitions. Despite this, FAST and the Marine Corps food service acquisitions experienced significant delays because of protests related to small business concerns. The R2 follow-on to the R2CSR program has been under strong congressional scrutiny. These experiences suggest that small business concerns will remain an important issue as long as service acquisitions continue to bundle services previously provided by small business.

Despite such persistent attention to small business issues, however, the question of whether small businesses fare better as prime contractors or as subcontractors remains open, without empirical evidence to provide an answer. The most that can be said is that some small firms prefer to serve as prime contractors, because they feel that the status of being a prime lowers their cost of capital or they fear being at the mercy of a prime contractor. Others prefer to serve as subcontractors to avoid having to learn everything required to do business with the federal government. That said, the small business community as a political force continues to favor prime contracting. This may result in part from persistent difficulties in accounting for how much benefit small contractors get from government contracting. Prime contractors are easy to identify; subcontractors are not, particularly beyond the second tier of providers in the defense industrial base. Because good measures of the benefits for subcontractors simply do not exist, focusing on prime contracts for small businesses simplifies the political discussion for everyone. Recognizing this problem, participants in the R2CSR and Marine Corps food service programs are developing methods to identify the full benefit of government revenues passing through these programs to small business. They plan to use these methods to verify the value of the program to small business advocates.

An issue that has received far less attention in the public policy debate is how prime contractors treat small and disadvantaged businesses as subcontractors. The primary public policy concern in the acquisitions we reviewed was whether primes were paying subcontractors fast enough. But wherever small businesses worked as subcontractors in these acquisitions, there were less visible questions: How did primes choose subcontractors? review their performance? inte-

grate them into the services the primes sold? mentor them on quality systems and on skills relevant to the new services acquisition environment writ large—throughout the economy? Proper integration and mentoring offer opportunities to help small firms grow; selection and performance criteria affect the kinds of subcontractors DoD procurements draw to provide services. Public policy discourse that focuses on these kinds of issues offers more room for win-win solutions consistent with DoD's high-level goals than do arguments that focus on number or value of prime contracts awarded to small businesses. As best commercial practice presses for the use of larger and larger bundles in services acquisition, a shift in the public policy discourse could help DoD take full advantage of the benefits of best commercial practice.

Small and disadvantaged business issues did not figure as major concerns in the other three large acquisition cases. Boeing uses the set of small business subcontracting goals that large defense contractors typically use; these did not stand out in the FIRST program. KBR operates the BSC program almost entirely outside the United States, so it did not face the same political scrutiny on this issue that those operating in the United States would. And security concerns so dominated NSA's priorities for the Groundbreaker program that small business concerns were secondary there.

OSD's Role

Small and disadvantaged business concerns will remain a contentious issue for the foreseeable future. OSD can anticipate being drawn into discussions between Congress and new service acquisitions repeatedly. With that foreknowledge, OSD should pay special attention to how DoD service acquisitions treat small and disadvantaged businesses. In doing so, it should be prepared to question how Congress frames small business issues and to offer an approach more conducive to progress on all DoD's goals. OSD can use accumulating experience with successful service acquisitions to aid such oversight. AT&L does not highlight small and disadvantaged business concerns in its strategic goals, but such concerns are an integral part of the health of the defense industrial base, which it does highlight.

Effects of Manpower and Personnel Ceilings

Broad manpower and personnel issues can easily drive requirements very early in a service acquisition. Only one of these acquisitions, the Marine Corps food service program, was driven primarily by manpower or personnel issues. In the food service case, the Marine Corps sought an explicit solution to a fixed ceiling on military manpower when it could not meet all of its military manpower requirements within the ceiling. But such manpower and personnel issues often helped shape other acquisitions we evaluated in important ways as well.

Congressional efforts to decrease DoD's acquisition workforce, as DoD downsized and its acquisition spending fell, have put increasing pressure on the acquisition professionals who remain. As so often is the case, process changes and technologies expected to enable fewer people to accomplish the same workload have not been as effective as hoped. So, as DoD has sought to rely still more on external sources while continuing to cut its acquisition workforce, pressure on the workforce has increased. Thus, the workforce has welcomed efforts to simplify acquisition or to transfer traditional responsibilities elsewhere. Because FAST, FIRST, Groundbreaker, and R2CSR all help reduce the workload of the traditional DoD acquisition workforce, they have been welcomed by acquisition professionals as a palliative. However, none of these contracts had reduction of pressure on the workforce as a primary goal.

More broadly, DoD uses manpower levels as a common measure of the size of its activities. As a result, it often pursues downsizing by cutting the levels of particular types of manpower. Such downsizing is at least as likely to induce a demand for an alternative form of manpower as it is to induce an effort to reduce the user's overall demand for manpower. By using numbers of organic billets to measure its size and thus to measure its progress in downsizing during the 1990s, the Army often simply encouraged its subordinate organizations to substitute contract employees for government employees. The size of the Army did not necessarily change, but the relative importance of contractors grew. A ceiling on government or military

personnel in a theater can have a similar effect—rather than reducing actual presence, it simply leads to substitution of contract personnel for government personnel. This phenomenon has had a direct effect on requirements for BSC.

As ceilings lead DoD resource managers to substitute more contract for organic manpower, the performance of this contract manpower becomes increasingly important. This probably helps explain the Army's emphasis on quality relative to cost in the BSC program, where contractors get very close to the warfighter in theater. Thinking more broadly, many of the factors relevant to quality of performance, addressed elsewhere in this report, should grow in importance as DoD continues to push for increased use of service acquisitions.

OSD's Role

OSD policies affect manpower and personnel ceilings. But these ceilings typically involve policies more closely associated with the Under Secretary of Defense (Personnel and Readiness) than with AT&L. AT&L should remain cognizant of how these ceiling policies drive the demands for the service acquisitions it oversees. As the proponent for performance in service acquisitions, AT&L holds the key to ensuring that ceilings advocated elsewhere in OSD have desirable effects on military capability in the department as a whole.

Outsourcing Issues

Observers of DoD's sourcing options often treat contracting and outsourcing as synonymous. They are not. Contracting occurs whenever DoD relies on a private-sector source; as noted in Chapter One, it affects 32 percent of the defense budget each year. It appears likely that a form of formal contracting even occurs when there is a public-private competition and the public source wins—the public source writes a performance agreement similar to a contract and is held accountable for its execution. Outsourcing occurs only when a work-

load moves from DoD to an external source.⁹ Our study primarily concerned contracting, but some degree of outsourcing occurs in three of the cases (BSC, Groundbreaker, Marine Corps food service) and is relevant to another (FIRST). When outsourcing occurs, it raises issues that must be addressed as an integral part of any service acquisition plan.

Two forms of outsourcing occur under BSC and its predecessor arrangements. First, when the Army began to use LOGCAP in the Balkans, it made an explicit decision to use an external source rather than reserve military personnel. In effect, it moved a workload from an organic source to a contract source. Because that workload did not exist before the Army made this decision, no one with an existing government job was actually displaced. Second, when workloads changed over time in the Balkans, the Army repeatedly substituted BSC services for organic capability to execute specific tasks. Whenever this occurred, BSC did displace existing billets. But the government personnel occupying these billets, mainly military, almost all returned home to occupy other government billets following their deployment. Such outsourcing has not seriously injured any well-organized constituency. BSC gives no attention to the displacement of such billets.

The Marine Corps food service program displaced about 600 billets in CONUS and substituted contract services for them. But, as in BSC, the billets displaced were occupied almost entirely by military personnel who went on to occupy unfilled billets elsewhere in the Marine Corps. Although the program displaced a few government civilians, it had only a marginal effect on a well-organized constituency. These displaced billets are not a priority in the Marine Corps program.

Groundbreaker expected to displace about 1,000 government civilians and 700 military personnel early in its acquisition planning. Many observers believed that this effect was large enough to require a public-private competition under OMB Circular A-76. The rules of

⁹ For a comparison of the scale of contracting and outsourcing in DoD today, see Moore et al., 2002.

A-76 could not have accommodated the changes that NSA had in mind under Groundbreaker, and no competition could have been structured under A-76 that would have yielded the arrangements planned. NSA argued successfully that Groundbreaker so changed the nature of service provision in NSA that it could be treated as a new program that was exempt from public-private competition. But as important as it was to NSA to avoid A-76, the burden of significant outsourcing did not go away. Under close scrutiny by OSD and Congress, NSA incentivized the Groundbreaker offerors to devise programs that would encourage displaced government employees to seek employment with the winning team. This soft landing added significantly to the cost of the acquisition, but NSA expected that over the long run, it would easily pay for itself in net savings to the government and improved quality of service.

Some degree of outsourcing occurred in FIRST when Boeing took on program management responsibility for parts relevant to a new weapons system, the E/F version of the F/A-18. That is, private employees substituted for government employees in this new workload. As in BSC, however, FIRST did not actually displace government personnel from existing jobs. FIRST is most relevant to outsourcing because it illustrates an innovative teaming alternative to outsourcing. Rather than giving the depot workload for the new system to a contractor, FIRST sought a seamless solution by making a contractor responsible for integrating a depot source with an end-to-end support system for the parts in question. Despite the challenge of this essentially experimental governance structure, the Navy ultimately preferred it to fighting the political opposition that would come from assigning the new depot workload to an external source.¹⁰ Even though this entailed a new workload, the depots in question

¹⁰ Early studies indicated that the Navy depots were a lower-cost source than Boeing, a finding that made it easier to avoid outsourcing. But the political cost of outsourcing could easily have defeated outsourcing, even if it promised to reduce costs. A recent DoD legislative proposal would allow DoD to count Boeing employees on site at Navy depots as government employees for the purposes of accounting used to comply with Congress's 50:50 rule (see U.S. Department of Defense, 2003a, Sec. 214). If this proposal passes, teaming arrangements like that used to avoid outsourcing under FIRST might become less attractive.

had related F-18 workloads in hand and excess capacity to handle additional workload. With the support of the congressional depot caucus, the Naval aviation depots (NADEPs) represent a formidable constituency that would have viewed outsourcing as an injury. Experience under FIRST will help the Navy determine how well such a public-private partnership works as an alternative to outsourcing.

OSD's Role

Taken together, these cases suggest three lessons for OSD. First, outsourcing grows in importance as the negative effect it has on an organized constituency increases. The larger its effect, the more likely the outsourcing will attract congressional attention, and hence the more likely OSD will become involved as an intermediary between a Congress demanding policy changes and information and a service acquisition trying to move ahead as rapidly as possible.

Second, one way to ameliorate the negative effects of outsourcing is to increase the likelihood that displaced employees will be protected. Groundbreaker protected them with attractive employment opportunities—opportunities to enter a growing industry with large future prospects—as well as large bonuses provided by the contractors in the program. Other forms of protection could include right of first refusal with a new provider, conditions on pay and benefits with the new provider, or lump-sum separation payments larger than those now used in formal reductions in force in DoD. The unions representing federal workers, such as the American Federation of Government Employees, oppose the provision of such protections. It is unclear what other constituency could support them. But Groundbreaker provides an example of how one proactive approach to a soft landing helped defuse a potentially explosive outsourcing issue.

OSD cannot address this kind of policy without the cooperation of the Office of Personnel Management. But where services acquisition involves outsourcing, OSD should recognize that protection of displaced workers provides an option it has available to help promote cost-effective and politically viable outcomes. When measuring its own performance in promoting the quality and morale of its work-

force, AT&L should consider not only number displaced, but also measures of how well those displaced were protected.

Third, using public-private competition is not necessarily the best way to defuse concerns generated by outsourcing. In any public-private competition, Congress requires DoD to use cost to choose between public and private alternatives.¹¹ Since those we interviewed were more interested in achieving non-cost goals, even if they did not achieve cost savings, they had little motivation to use public-private competition for large, complex service acquisitions. Public-private teaming is an approach that could have broad applicability if it works well. OSD should monitor ongoing teaming experiments to determine how well they work and what accounts for the success of those that perform well. AT&L should consider the current inherent limitations of competitive sourcing as it measures the use of such sourcing in order to monitor progress against its strategic goals. A broader view of strategic sourcing, which includes significant alternatives to competitive sourcing, is likely to promote DoD's strategic goals.¹²

Various Forms of Performance-Based Services Acquisition

The FAR defines PBSC in a precise way, stating that PBSC occurs when a contract¹³

- (a) Describe[s] the requirements in terms of results required rather than the methods of performance of the work;

¹¹ United States Code, Title 10, Secs. 2461 and 2462. Other government agencies do not face the same restriction. DoD is currently attempting to have this restriction removed. See U.S. Department of Defense, 2003a, Sec. 405.

¹² For a discussion of strategic sourcing that treats competitive sourcing as one of many alternatives, see Camm, 2002.

¹³ FAR Part 37.601. Note that NDAA, 2002, Sec. 801, defines PBSC more loosely. It states that a performance-based contract "includes the use of performance work statements that set forth contract requirements in clear, specific, and objective terms with measurable outcomes." But most observers accept the FAR definition as the appropriate standard in DoD.

- (b) Use[s] measurable performance standards (i.e., terms of quality, timeliness, quantity, etc.) and quality assurance surveillance plans . . . ;
- (c) Specif[ies] procedures for reductions of fee or for reductions to the price of a fixed-price contract when services are not performed or do not meet contract requirements . . . ; and
- (d) Include[s] performance incentives where appropriate.

Within DoD, an acquisition is recorded in the Federal Procurement Data Base as using PBSC if these criteria apply; PBSC does not occur if these do not apply. The acquisitions we reviewed all embody the spirit of this definition, but they are not all technically consistent with this definition. As it pursues increased PBSC as one of its strategic goals, OSD should keep in mind how subtle PBSC can be in practice and ensure that OSD's oversight promotes practices that support DoD's substantive strategic goals and does not simply provide a way for acquisitions to check an administrative box without changing real performance.

Consider these examples:

The FIRST program probably approaches the FAR definition most directly. It uses specific logistics metrics, collected in a joint Navy/contractor operational logistics information management system, to measure performance. These measures, which are computed using standard Navy logistics transactional data, include detailed, objective, quantitative measures of supply response time, time on back order, and stock effectiveness on aircraft carriers. It supplements these with subjective measures of fleet support and supportability, measures that will fall in importance as better data on the objective measures accumulate. These measures directly capture outcomes relevant to the performance of the fleet logistics system. Failure to meet the targets set for these metrics directly affects the twice-yearly award fee; it can also affect the Navy's willingness to exercise options in the contract. The contract adjusts fee rather than price itself because it is primarily cost based. As the contract migrates to a fixed-price regime, performance will presumably affect price directly. In sum, the FIRST contract unquestionably meets all requirements of the FAR definition of PBSC.

Groundbreaker is also closely compatible with the intent of the FAR definition of PBSC. But rather than setting performance standards and prices in advance, NSA relies on benchmarking to set these in the future. In effect, the Groundbreaker program specifies a governance structure in which performance can be linked to payment, but it does not define the linkage itself. The linkage will change over the course of the program as the services provided change and the commercial sector providing comparable services changes its level of performance.

BSC uses an award-fee process to link performance to payment and has extensive reporting requirements on every aspect of performance under the contract. KBR files daily situation reports that keep Army offices in theater and in the United States well informed about the status of each activity that KBR performs. Such reports inform the BSC award fee, but the fee-determination process is much broader and accepts a wide range of input from many parties. In each fee determination, the actual fee awarded is chosen in response to specific recommendations from the process but ultimately on the basis of the subjective judgment of an official in the Army Corps of Engineers, where the BSC program office resides. In sum, the BSC arrangements are broadly compatible with the FAR version of PBSC, but the Army deliberately avoided the precision favored in the FAR to allow effective partnership between the Army and KBR on a very broad, incompletely defined set of issues.

The Marine Corps food service program promotes high-quality performance in a distinctly different way: It pays Sodexo for each meal it sells. The Marine Corps provides mandatory menus and negotiates recipes for meals, but it does not monitor the actual quality of the food served—the requirement tying meals sold to amount paid provides the primary discipline. And Sodexo is allowed to augment the required menus if it believes this will enhance sales enough to pay for the augmentation. In sum, the contract includes no formal performance standard for the Marine Corps to measure and no formal method to adjust total price up or down for deviations from the standard. And yet experience with precisely this kind of contract in com-

mercial practice verifies that it should create intense incentives for Sodexho to improve the morale of the Marines served in mess halls.

In completely analogous terms, the R2CSR program itself will be rewarded or punished in proportion to its ability to satisfy its users. Just as individual Marines effectively decide what the Marine Corps pays Sodexho by deciding where to eat, individual users in DoD and elsewhere decide how much they pay the R2CSR teams in the program and how much they pay the Army office that manages the program. In this context, R2CSR applies to its own program management office the form of PBSC that the Marine Corps uses to discipline Sodexho, encouraging discipline in the quality of service provided. The FAR does not recognize this arrangement as a form of PBSC when it is aimed at a government activity.

Although the FAST program's use of past performance may look unrelated to PBSC, it offers a less direct, but potentially potent, incentive for performance. In effect, emphasizing past performance in task-order source selections rewards a provider for its performance relative to a standard, not by adjusting its price for that performance, but by changing its prospects for future work.¹⁴ In this regard, using a term award and seriously linking the buyer's decision to exercise future options already included in a contract can be regarded as simple applications of past performance assessment designed to motivate performance. The task-order structure of the FAST program allows it to use formal past-performance assessment to achieve very similar effects within the program itself.

OSD's Role

The diversity revealed in this review surely reflects even greater variation around DoD. Two points relevant to OSD's strategic goals are important. First, all of these practices can help DoD not only reduce acquisition cycle time, operating and support costs, and infrastructure

¹⁴ Chrysler actually formalized this relationship by giving its providers a choice about how they would prefer to be rewarded for high-quality performance—with an immediate premium or award fee (which the FAR clearly envisions as PBSC) or with points that will enhance its position in source selections for future work (which does not sound like PBSC).

costs, but increase customer satisfaction as well. So DoD's ability to design and execute arrangements of this kind should be of great interest to AT&L. Second, these practices may or may not be defined as PBSC under the FAR definition that AT&L uses to track progress toward its goals of ensuring that half of all service contracts are performance based. The arrangements described here all pursue the spirit of that goal; they may not be recognized that way. More important, service acquisitions can achieve the FAR definition of PBSC without attempting anything as aggressive as several of these arrangements. That is, simply achieving the FAR definition of PBSC is not enough. Speaking generally, the arrangements reviewed here display an ability to adapt innovative practices to DoD's procurement environment, an ability that demands new skills in the AT&L workforce. The particular skills required will put less emphasis on complying with the goal to apply PBSC in 50 percent of DoD service acquisitions by 2005 and more emphasis on solving problems in specific settings to promote performance in those settings in the most effective way possible.¹⁵

Public-Private Interactions Early in an Acquisition

As acquisition reform has encouraged more intimate interaction between DoD and its actual and potential service providers, interaction early in an acquisition has become especially helpful. All of the cases we studied provide evidence of this and little evidence of problems that some fear can result from less than arms-length interaction.

Market research is more important than ever in services acquisition. As standard commercial practices change more rapidly, it becomes harder and harder simply to duplicate in a new acquisition what worked in the last. Each of the acquisitions benefited from early market research, which often involved direct discussions with potential providers. The Marine Corps food service program, for example,

¹⁵ OMB set a 50 percent target for the use of PBSC for all applicable contracts larger than \$25,000 in FY 2005 (for details, see OMB, 2001a).

discovered the potential of centralized provision of services through cook/chill technology by talking to providers using this technology; Sodexo was one of these. This helped the Marine Corps imagine a completely new, regional approach to food service. The Marine Corps also discovered a commercial, output-oriented pricing system that fundamentally changed its approach to quality assurance. Market research on both technological and institutional innovations is important.

Early integration also moved detailed data from the government to potential providers. The FAST and Groundbreaker programs learned early the benefits of extensive sharing. Without it, potential providers could not turn around and provide the data the government needed. FIRST's heavy use of public-private integrated process teams (IPTs) made such information flow easier during early planning stages. Only BSC reported serious concerns about control over proprietary information in the early phases of the acquisition. The Army gave close attention to which data from its incumbent provider, KBR, it could share with offerors in the upcoming competition. By focusing on what the Army bought from KBR and filtering out details on how KBR provided what the Army bought, BSC was able to manage this early exchange of information successfully.

Early interchange of detailed information generated a number of tangible benefits for the cases studied:

- In Groundbreaker, it helped potential offerors develop more-detailed plans of how they would meet the demands of the acquisition. As a result, offers received all cost substantially less than NSA had anticipated. Appropriate detail in the offers helped NSA verify the realism of the offers. An ability to assess realism early in the acquisition was critical to Groundbreaker's success, because NSA wanted the one winning provider team to assume most risks following the formal source selection. This could not occur if the winner could not perform as promised.
- Offeror participation in the development of roles and responsibilities and source selection criteria in the FAST program built confidence in the criteria. This encouraged effective private-

sector participation in the acquisition process, even though, in the end, private-sector input on these issues had a limited effect on how the Air Force ran the program. Early private-sector participation in an Air Force-sponsored risk assessment helped the Air Force look beyond its own risks and reflect contractor risks in the FAST program in a way that balanced buyer and seller interests to their mutual advantage.

- The Marine Corps's proposed regional approach to food service challenged its traditional approach, which relied heavily on small and disadvantaged prime contractors in individual mess halls to provide such services. Early interaction with small providers helped the Marine Corps build the case for its basic acquisition approach, which GAO ultimately accepted following protests.
- Going back to the LOGCAP program that provided the basis for BSC, the Army could not have developed details on roles and responsibilities in the contract without the extensive participation of the contractor at that time, KBR. Similarly, the Navy could not have developed details on the roles and responsibilities and decisionmaking processes for the FIRST program without Boeing's extensive, early involvement on relevant IPTs. These IPTs improved the Navy's ability to balance risks to itself and to Boeing in ways that served their mutual interests.

In sum, some of the early interaction helped buyer and seller prepare for continuing close interaction and was necessary to set up processes that would support such interaction. Other early interaction helped the buyer choose a seller it could hand off to with confidence that the seller would provide what the buyer had expected when designing the acquisition.

In all of these acquisitions, the buyers were ultimately able to find ways to distribute extensive information equitably. They were able to hold discussions about proprietary capabilities while protecting proprietary data and dealing with all potential offerors on a level playing field. As noted above, this was not easy; DoD buyers learned how to do this as they proceeded. In the end, however, they learned

enough to support effective, early data exchange that benefited all of these acquisitions.

OSD's Role

This is good news that many in DoD are still skeptical about. OSD can continue to monitor efforts to exchange data early in acquisitions to help build the case for these benefits and can then spread the good news throughout DoD. The cases reviewed suggest that the benefits to be realized address OSD's strategic goals directly. Individual acquisitions illustrate cases where early interaction accelerated the acquisition cycle time, enhanced competition to reduce operating and support costs for the services in question, and matched buyer priorities to seller capabilities in ways that were likely to increase both the benefits from performance-based contracts and customer satisfaction.

Buyers' acquisition professionals need additional skills to benefit from early interactions. Enhanced problem-solving skills will help these acquisition professionals sustain the integrity of the acquisition process and its equitable treatment of offerors in the particular circumstances of a new acquisition. Functional personnel responsible for defining requirements and preparing for quality assurance need to learn how to look outside DoD for new ideas and adapt these ideas to the defense setting. OSD can help build the skills its workforce will require in its policies on training and personnel development.

Public-Private Partnership Throughout an Acquisition

The acquisitions illustrate how early interaction between a buyer and potential offerors can become the first step in a close dialogue between buyer and seller that continues throughout a service acquisition, until the closeout of the contract. In each of these acquisitions, the buyer consciously sought a partner for the duration of the contract and thus needed to support the contract with other arrangements that facilitate partnership.

The provider plays an integral role in early and ongoing planning in these acquisitions. Initial work under LOGCAP, which

underlies BSC, was primarily planning work. Although actual provision of services dominates BSC now, the contract still covers planning activities relevant to changes in the work scope. KBR participates in Army planning efforts to ensure that they fully capture KBR's capabilities and KBR understands what the Army expects. Even though the formal contract *allows* for such planning, active Army support for it results from an ongoing demonstration that the Army benefits from including KBR in its planning.

Groundbreaker in effect devolves to the Eagle Alliance the responsibility for details of the information technology architecture that supports its non-core missions. It is too early to say how this will work in practice, but the acquisition plan presumes that the Eagle Alliance will choose the technologies that allow it to perform as well as possible against commercial benchmarks. This presumption shifts major responsibility for planning to the Eagle Alliance.

Boeing assumes similar responsibility for integrating the support of parts unique to the F/A-18-E/F but in a much more structured setting. IPTs with Navy and Boeing participants permeate the program, creating a minutely specified governance structure in which Boeing and the Navy will cooperate for the life of the agreement. Navy quality assurance evaluators are all members of such joint IPTs.

Timely data sharing is required to make such cooperation effective. The FAST, FIRST, and Groundbreaker programs all highlight the importance of implementing and sustaining high-quality data connections. FIRST formally incentivized their implementation with an award fee. Groundbreaker limited participation in the source selection to offerors it expected to be capable of participating in effective, secure interconnections. R2CSR continued to invest in its information management capabilities throughout the program and used these capabilities to help market the program to users.

Cooperative investment decisionmaking can be an integral part of such partnerships. FIRST carefully specifies the responsible party for investments associated with improved reliability and maintainability (Boeing) and the responsible party for investments that improve military capability or safety (the Navy). It uses IPTs to coordinate decisionmaking on such investments, allowing Boeing to make

recommendations on investments that it will not pay for. The Marine Corps food service program has a much more limited scope. The government retains responsibility for physical assets in mess halls, but Sodexho assumes responsibility for maintaining them. Sodexho recommends new investments to the Marine Corps and can choose to make its own investments if these pay back fast enough to justify themselves. BSC works in a similar manner. KBR manages a great deal of government-owned equipment and can make recommendations on investments. But unlike the Marine Corps program, with its fixed-price-incentive structure, BSC reimburses KBR for all allowable costs it incurs. As a result, the Army and KBR jointly plan investments and the acquisition of materials for them.

A central element of the FIRST program has Boeing integrate support services from Navy depots in the context of an end-to-end support process for parts. This requires ongoing close coordination between Boeing and the Navy on many levels. The FAST program allows the development of task orders in which private-sector participants can use support services from Air Force depots in a similar manner. It does not dictate such use, as FIRST does; rather, it makes it available if users of the program choose to ask for such arrangements. Details of ongoing coordination between buyer and seller must be included in the arrangements to support any specific task order.

The more heavily DoD buyers rely on such partnerships, the harder it is for offerors other than the incumbent to compete when DoD recompetes a contract. Formal Army doctrine on the use of contractors on the battlefield, for example, favors the development of "habitual relationships" precisely to create and sustain such partnerships.¹⁶ But some would argue that the relationship between the Army and KBR in the Balkans became so "habitual" that no other credible offeror could compete for the work in 1999. In fact, only two firms ultimately made offers in the 1999 BSC competition. Many other firms that had participated in early stages of the acquisi-

¹⁶ Headquarters, Department of the Army, *Contractors on the Battlefield*, 2000.

tion ultimately concluded that the probability of beating KBR was so low that they were unwilling to invest their scarce bid and proposal funds.

Something similar can occur on a smaller scale in the context of the FAST and R2CSR programs. Both programs pay special attention to the following problem: One provider in the program wins a competition for a specific task order. Executing this task order gives the winner technical knowledge, experience, and an enhanced understanding of the buyer's priorities that can make it the only plausible or viable provider of services in specific follow-on task orders. When should a buyer be allowed to award such follow-on task orders to a sole source? Both programs highlight arrangements to ensure "fair access" to follow-on task orders, and a considerable amount of time was absorbed early in the FAST acquisition to ensure that these arrangements were crafted and interpreted properly.

DoD must find ways to balance the demands for full and open competition, as defined in CICA, against the benefits of building and sustaining effective habitual relationships between buyer and seller. Commercial firms increasingly prefer habitual relationships—or at least longer-term contracts—to repeated competitions for critical work.¹⁷ Modern antitrust law attends less to the "structure" of a market (the number of effective competitors) and more to "behavior" and "performance" in a market (evidence of collusive agreements and of the efficiency gains that come from mergers that reduce competition). CICA was written at a time when antitrust law paid more attention to structure, or the state of competition per se. If CICA were written to reflect how federal antitrust law currently treats competition, it would probably create a more favorable environment for well-framed habitual relationships, even if they reduced competition.

OSD's Role

As additional service acquisitions test the balance between sustaining competition and habitual relationships, OSD is likely to face a con-

¹⁷ Moore et al., 2002, provides evidence on recent trends.

tinuing need to clarify DoD's priorities on this balance. OSD's involvement will probably yield decisions on the allowable forms of specific service acquisitions and on broader DoD policy in this arena.

In terms of AT&L's strategic goals, this balance can be framed as follows: Partnerships and habitual relationships may reduce the degree of effective competition, but they can also reduce acquisition cycle time, operating and support costs, and infrastructure costs, as well as increase customer satisfaction and the benefits from PBSC and customer satisfaction. The design and management of such partnerships will affect the appropriate level of experience and the skill mix of AT&L's workforce as these partnerships become more prevalent.

Evaluating Past Performance in Best-Value Competitions

Five of the six acquisitions we evaluated used a best-value competition to choose the source; the sixth was a sole-source procurement. DoD has a great deal of experience with best-value competitions for large acquisitions, but not for the acquisition of services. Following the lead of best commercial practice, DoD increasingly depends on best-value competitions in service acquisitions and, in particular, on assessments of past performance in these acquisitions. The case studies offer a useful place to examine recent federal experience with past performance assessments.

Best-value competitions, by definition, use source selection criteria other than cost. Until recently, the most common criteria included in federal procurements were forward looking: the effectiveness of the technical or management plan, the quality of the personnel and facilities to be involved, the degree of access to technology desired, and so on. In principle, all of these are things that an offeror can control and adjust in a proposal and that can be compared against a clear standard identified in the source selection. Past performance, by definition, is backward looking: the offeror must live with its performance on recent efforts related to the source selection. The issues of concern with regard to past performance assessments include the following:

- If all offerors have not performed related work for the federal government, can they be equitably compared against the same standard? To ensure comparability, should all past performance reports come from a common database, maintained in a common format, with a common policy on review and correction of errors?
- Even within the federal government, what performance is “recent”? What performance is “related”? For multidivisional firms, which divisions should be reviewed in any particular source selection? What subcontractors should be reviewed?
- If an offeror has a poor past performance record, what can it do to overcome it in future federal procurements?
- It is costly to collect and assess past performance information. What cost-effective options exist to use such information?

The more sophisticated the acquisition team and the more resources available for addressing issues of past performance assessment, the fewer the problems these issues are likely to present. The acquisitions we evaluated provide insight into some of the kinds of problems that can arise, although they did not experience all of the concerns listed above.

BSC relied heavily on past performance as a criterion. Given the Army's greater attention to performance than to cost in the acquisition as a whole, it is not surprising that the Army did not emphasize low cost. Because BSC grew directly from LOGCAP activities in the Balkans, experience with LOGCAP heavily shaped BSC. Some observers recall the Army's experience under the initial LOGCAP contract. It was widely praised for the quality of service offered, but many thought it cost the Army too much. The LOGCAP contract was re-competed after five years. For the second LOGCAP source selection, the Army gave cost more attention and got a different, lower-cost provider. By the time the formal BSC competition occurred, the pendulum had swung back to favor performance over cost; and by then the Army had considerable experience in the support of forces deployed to the Balkans that it considered relevant. Because the Army

was pleased with KBR's work in the Balkans leading up to the BSC competition, heavy reliance on an assessment of past performance of the services included in BSC in a setting like the Balkans strongly favored KBR. This raises again the basic tension that exists between sustaining effective habitual relationships and sustaining full and open competition. Relying heavily on past performance favored the habitual relationship.

At the other extreme, NSA invited only a limited number of teams and team members to participate in its Groundbreaker competition. In qualifying these offerors for the competition, it considered past performance only as a pass/fail criterion.

The Marine Corps also saw only limited value in past performance assessment in its food service program, in part because the program contemplated a scale of work never attempted before. Nonetheless, the Marine Corps included past performance as a criterion and gave it low priority in the source selection. During source selection, difficulties with the assessment of past performance contributed to a protest and complicated completion of the acquisition. Past performance had a low enough priority that these difficulties were probably not material; they could not have affected the outcome of the competition. But GAO allowed a review. This complication probably occurred more because of the novelty of the acquisition as a whole—new arrangements create uncertainty and draw litigation—than because of past performance per se. The participants agree that they would proceed differently in the next acquisition of this kind.

The FAST program expected past performance to be an important discriminator in its source selection and gave it considerable attention in the acquisition plan. Effective past performance assessment takes time and resources to execute. Even input provided in a standard format often requires follow-up with the buyers providing the information to clarify relevant details. As a result, commercial acquisitions tend to wait to collect past performance data until they have winnowed the number of competitors by other means. This allows more in-depth examinations of only a few offerors. In the FAST program, the Air Force required substantial input on all of the team

members in all offering teams included in the acquisition. Anticipating that past performance assessment would take time, the Air Force actually asked for input early in the source selection, before any down-selection could occur.

The result was that the FAST program received more input from any one team than a normal commercial competition would receive from all offerors together. The Air Force had to review submissions from many prior buyers of services from hundreds of firms—an overwhelming task. It managed to get through this and was satisfied with the final assessment, but it plans to focus future past performance assessments on a few major players—perhaps the prime contractors and other team members that will account for more than a certain percentage of work. This change will presumably also require an adjustment in what past performance is reviewed. A selective review will presumably place relatively greater attention on the major players' abilities to integrate performance and ensure quality, and relatively less attention on their ability to perform work directly.

The R2CSR performance risk assessment group had a similar experience, for similar reasons. CECOM plans to de-emphasize the relative importance of past performance in the follow-on acquisition and ask for past performance on a much more limited set of team members.

Despite its initial difficulty, FAST still planned to rely on past performance assessments in the competitions that occurred for task orders over the course of the program. It saw accountability for performance on past tasks inside the program as an integral part of its plan to assure high-quality performance on all tasks. Focusing on past performance within the program offers two benefits: it discourages offerors from becoming complacent because they have already been qualified, and it lowers the cost of assessing past performance by relying on a standardized approach to recording performance within the program.¹⁸

¹⁸ Currently, FAST uses past performance on some orders to evaluate a very relevant area of the contractor team's experience. When it does, it looks at only the key players on the team

Taken together, these acquisitions illustrate that DoD is still learning how best to use past performance as a criterion in best-value competitions. Problems of concern, say, five years ago were somewhat different from those discussed here, and problems five years from now will be different in other ways. All the problems seen are natural consequences of growth.

OSD's Role

Over time, OSD is likely to find that assessing past performance is important to AT&L's strategic goals. A reliance on past performance assessment may increase acquisition cycle times and can play an integral role both in enhancing OSD's ability to reduce operating and support costs and infrastructure costs and in increasing customer satisfaction. In addition, it can help OSD incentivize providers to execute the levels of performance they promised in performance-based services contracts. Public-private competitions cannot use past performance as a criterion to judge public-sector performance; this problem is not relevant to the cases reviewed here.¹⁹ Assessing past performance effectively is challenging; heavier use of it will require a change in the AT&L skill mix.

Streamlined Buyer Oversight

All of the acquisitions reviewed move day-to-day responsibility for the services involved from DoD to contract providers. Providers take on increased day-to-day responsibility for many activities originally performed inside DoD, and they take on increased responsibility for integrating services previously procured from multiple sources. In addi-

for that particular order. Some orders do not require further past performance assessment than what was originally done on the basic contract.

¹⁹ This is true for two reasons. First, Congress requires DoD to use only cost to compare public and private "offers." Second, OMB feels it is unreasonable to judge public activities in a competition on the basis of their past performance when they did not know this would occur and had limited ability to influence their performance in the past. This policy is unlikely to change in the revised version of OMB Circular A-76 under development now.

tion, they often take on responsibility for day-to-day quality control, either for their own services or services provided by other contractors. From this perspective, such delegation of responsibility is a central feature of the types of service acquisitions we reviewed.

Groundbreaker illustrates the most extensive delegation of all the case studies. The Eagle Alliance provides day-to-day non-core information services previously provided inside NSA and by individual contractors and is responsible for using specified metrics to monitor the performance of these services. Another contractor to NSA, a third-party provider of audit services, periodically audits records kept by the Eagle Alliance to verify their validity. Still another contractor to NSA, a third-party provider of benchmarking services, periodically collects data on specified metrics from other information service acquisitions like Groundbreaker and compares these with performance data from the Eagle Alliance. The benchmark data serve as the basis for setting performance standards and prices for the services that the Eagle Alliance provides. Many parts of DoD consider a number of the responsibilities delegated to contractors in Groundbreaker to be inherently governmental. NSA has been careful to retain responsibilities for setting performance requirements and obligating funds on an ongoing basis; it retains full responsibility for making the decisions that affect outcomes for the government buyer. Wherever possible, it has delegated other responsibility.

Because BSC is cost based rather than price based (like Groundbreaker), the Army must remain more engaged than NSA to ensure that costs incurred are appropriate and that they should be allowable. Nonetheless, the Army seeks to delegate significant responsibilities. When a new, approved requirement arises with BSC, the Army typically brings a broad statement of the requirement to KBR. KBR fleshes out the requirement and develops a task description with a rough-order-of-magnitude cost estimate. The Army discusses the task description with KBR and reviews the cost estimate. Further iterations occur until the Army and KBR reach agreement on a formal task statement to add to the BSC work scope. During this process, the Army pays KBR for its planning input. This process of interaction, which can include KBR in the Army's internal planning proc-

esses, gives KBR substantial responsibility that other government buyers retain in-house.

FIRST relies on a similar degree of extensive interaction between the Navy and Boeing. It intends to delegate more and more responsibility to Boeing over time as the F/A-18-E/F matures and enough data exist on its performance to set more-reliable performance targets. Early in the acquisition, the Navy will use primarily subjective judgments, acquired through routine team interactions, to assess Boeing's performance. As better performance data accumulate, Boeing and the Navy will negotiate more objective performance targets for metrics that the Navy can measure with its operational information systems. That is, the Navy will monitor Boeing's performance as a normal part of its operation of the F/A-18-E/F fleet.

An integral part of this plan includes the use of an oversight process like that used by the Federal Aviation Administration to monitor commercial airlines. Under this approach, the Defense Contract Management Agency (DCMA) certifies Boeing's maintenance processes rather than its individual maintenance actions. This approach "builds quality in" to a process rather than assuring it "at the end of the pipe." It allows the government to retain full responsibility for effective oversight while simplifying the oversight process. It also changes the nature of government oversight and the skills involved while reducing the resources the government must expend to maintain effective oversight.

The Marine Corps food service program simplifies oversight in another way. As noted above, it relies on Sodexho's incentivized desire to sell meals in mess halls to assure the quality of the food served. It focuses ongoing Marine Corps oversight on attributes of performance not incentivized by the fixed price at the heart of the relevant contracts. For example, the Marine Corps sets standards for things like cleanup time following a spill and monitors performance against these standards. Because the metrics involved are easier to measure than the basic quality of food served, this approach simplifies the Marine Corps's oversight responsibilities.

In the FAST and R2CSR programs, the nature of oversight differs qualitatively from that described above. These two programs are

responsible primarily for facilitating source selection for individual task orders. Once a task begins, the buyer of the task takes responsibility for overseeing performance. The FAST and R2CSR program offices can monitor the status of administrative milestones, such as the filing of reports, occurrence of meetings, and payments. And, as needed, they can help buyers manage their oversight of the providers of services included in the programs. But these program offices have no substantive expertise to assess performance *per se*. To some degree, these government program offices delegate responsibilities to the program offices for each of the contractor teams, which can act as integrators for services provided and ensure service provision when a subcontractor fails to perform. Placing two program offices—a government office and a contractor office—between any buyer and seller could in principle make oversight more complicated. In practice, these programs have worked primarily because these program offices do not get directly drawn into many oversight problems after tasks occur. That appears to be because few oversight problems have occurred—task orders are well enough defined and sources well enough chosen and incentivized to avoid them. Users return to these programs because the services they provide are worth the cost to the users.

More generally, the service acquisitions we reviewed, and others like them, allow simplified oversight precisely because DoD has chosen a reliable source, defined what is expected in clear terms, rewarded providers to perform well, and worked constructively with them to resolve problems that threaten performance. These elements of services acquisition, by themselves, open the door for simplified oversight by reducing the number and severity of problems that must be resolved. That is, the simplified oversight methods we observed in our case studies would not succeed in the absence of many other features of these acquisitions, as described earlier.

The government officials interviewed in this study generally agreed that simplified oversight had helped them deal with reductions in DoD's acquisition workforce without experiencing a drop in the performance of contractors. For a smaller workforce to achieve the same level of performance from external providers, that workforce

needs new skills—skills to prepare acquisitions in ways that allow simplified oversight, and skills that allow government workers to give more attention to problem solving and less to compliance.

OSD's Role

Simplified oversight is directly relevant to AT&L's strategic goals. Properly implemented, it can reduce operating and support costs and infrastructure costs associated with the acquisition process itself. Measurement of customer satisfaction is likely to be an integral part of simplified oversight. PBSC can, but need not, lead to simplified oversight; AT&L should not assume that an acquisition will be easier to oversee simply because it uses a performance-based contract, as defined in the FAR. And as noted above, to simplify oversight effectively, AT&L will require different skills in its workforce.

Managing Contingency-Related Surprises

The uncertainty associated with the current global political-military environment has increased the value of arrangements that can adjust quickly to changing requirements. The global war on terrorism since September 2001 has increased this value further. All six of the acquisitions we evaluated addressed the need for flexibility and responsiveness in one way or another.

The FAST and FIRST programs define surges formally and explain how buyer and seller will react to them in these programs. They also ensure continuity of service during any transition to war. The Marine Corps food service program allows the Corps to deploy Marines involved in the program without notice and requires Sodexo to assure continuity of service when such deployment occurs.

Less directly but equally importantly, the BSC, FAST, and R2CSR programs provide short cycle times to approve and initiate new tasks in these programs. These arrangements allow quick surges in existing activities and quick adjustments of work scope.

A variety of arrangements support such agility. The clear and detailed assignment of roles and responsibilities in the FIRST and Groundbreaker programs limits room for disagreement or misunderstanding, thereby simplifying joint accommodation to change. Extensive buyer-seller teams in FIRST support quick resolution of remaining issues.

Similarly, BSC, FAST, and R2CSR have well-defined processes for executing changes quickly. Because ongoing change is so pervasive in these programs, these processes are well understood by the relevant parties and thus do not have to ramp up from a cold start. High-quality connectivity and data management support these processes.

Providers can be compensated for higher costs associated with addressing surprises quickly. The FAST program identifies a formal premium for work performed during a surge. To support this, it also provides a clear definition of when a surge occurs. BSC is cost based and thus covers all allowed costs automatically. Time is needed to authorize additional allowed costs, but in practice, the time needed to plan a change is typically longer than the time needed to execute the administrative steps required to authorize it under BSC. KBR has occasionally funded responses to avoid delays, but the process has normally been fast enough to avoid such an action. The Marine Corps food service program explicitly allows equitable adjustment for costs incurred to assure continuity of service when a deployment occurs. Sodexho does not anticipate a need for equitable adjustment; its other incentives are strong enough without detailed arrangements.

The Navy gives Boeing relief from a requirement to meet its targets when a surge directly affects those targets. This provides an alternative incentive, but one that allows quality to fall rather than cost to rise during a surge.

Implicit in all these arrangements is an expectation that buyer and seller trust one another and intend to support the relationship even when surge and other contingency-related changes place stress on it. The buyers and sellers associated with BSC, FIRST, and Groundbreaker had good relationships before any of these programs began. The mutual trust in these programs is based at least in part on

this mutual history, which is a critical product of habitual relationships.

The Army and Lear Siegler Services, Inc., had a good relationship prior to R2CSR. But mutual trust may be less important here, because buyer-seller interaction is simpler in this program and disciplined by the continuing presence of competition at the task-order level, competition that can examine past performance as appropriate. The need to continue selling the program to potential users imposes additional discipline on the Army program office and contractor team members. As in R2CSR, buyer-seller interaction is relatively simpler in FAST than in the other five programs. The use of past performance in task-order competitions provides additional discipline.

OSD's Role

AT&L's strategic goals address the importance of surge and responsiveness to contingencies indirectly as a key element of linking the defense infrastructure to the defense strategy. Responsiveness during a contingency may also be thought of as an element in acquisition cycle time and customer satisfaction. The acquisitions we reviewed suggest the pervasive importance of this priority. AT&L might consider giving flexibility, responsiveness, and continuity of service during a contingency more explicit attention. The six acquisitions illustrate the range of service acquisition techniques available to improve DoD's responsiveness during a contingency.

Implications for the DoD Acquisition Workforce

The acquisitions reviewed share several attributes that make them different from DoD's typical service acquisitions in the past: They are large, they are performance based, and they involve new forms of public-private coordination and competition. These shared features of acquisitions that differ in many other ways yield several common

implications for the members of DoD's workforce associated with service acquisitions in the future.²⁰

The acquisitions typically began with or drew from programs that began with extensive interaction between DoD and potential offerors. BSC and FIRST ultimately grew from detailed planning between DoD and providers already being worked with. FAST, Groundbreaker, and the Marine Corps food service all used extensive market research, industry days, planning studies, and other interactions between DoD and the private sector to frame their approaches. Such interaction requires special skills in the federal workforce. All of the acquisitions rejected a simple approach that took procurements tested under the FAR in the past as the only models for future acquisitions. They sought new approaches that reflected the capabilities of specific providers and, more generally, broad commercial capabilities. This creative, externally oriented perspective differs fundamentally from the compliance orientation that colors so many DoD service acquisitions elsewhere.

Because they are large, these service acquisitions often look as if they could be managed much like system acquisitions and will require many of the skills DoD has already developed for system acquisition programs. But they differ in an important respect. Because so many service acquisitions involve services with commercial analogs, service acquisitions benefit from an openness to commercial practice, which is rapidly changing in most areas of interest to DoD. The federal workforce will benefit from people with the skills and attitudes required to reach out to commercial sources of information and to shape them to the peculiarities of the federal acquisition environment. Many attributes of the acquisitions reviewed here can be thought of as precisely the products of such a process.

Because they are large and cover many different kinds of services, these acquisitions also typically require the coordination of many different parts of DoD itself to succeed. BSC is probably the best ex-

²⁰ A broader discussion of the points raised here and references to relevant literature on these points are contained in an unpublished 1999 document by Camm and Moore and in Anderson, 1999.

ample of that complexity in the group. The Army Corps of Engineers owns the contract, U.S. Army in Europe (USAREUR) pays for the services provided through the program, the logistics staff of the joint commander in the Balkans is responsible for integrating BSC services with other organically and contract-provided services in theater, DCMA administers the contract in theater, and representatives of the forces deploying to the Balkans actually receive the services and monitor their execution on a day-to-day basis. All of these players have different priorities and different exposures to the program, and BSC can continue to succeed only if their workforces are prepared to work together in a coordinated manner.

Other acquisitions exhibit variations on this challenge. The Army's CECOM effectively owns the R2CSR program, but the program is available to any federal agency that wants to use it. Effective coordination between users and the program is important to its success.

The Naval Air Systems Command (NAVAIR) and the Naval Inventory Control Point (NAVICP) jointly manage the FIRST program through two contracts covering the various logistic elements. On 9 May 2001, NAVICP awarded a contract to provide supply support; on 11 April 2003, NAVAIR awarded a contract to provide technical data, support equipment, field support, and sustaining integrated logistics support. Boeing established customer support agreements (CSAs) with each Naval aviation depot buying labor and repairs in accordance with the specific CSA.

Greater coordination among DoD organizations is required to use these programs because they in effect move contractors closer to the ultimate DoD users of their services and, in the process, draw contractors into government processes they did not traditionally touch in the past.

Performance in these programs heavily focuses on functional personnel who are not now counted in formal measures of the defense acquisition workforce.²¹ The FIRST program may be the best

²¹ The Defense Acquisition Workforce Improvement Act of 1990 (DAWIA), 10 U.S. Code, 87, provided the parameters that have been used since to define the twelve career fields in-

example among the acquisitions we reviewed. FIRST's efforts to define performance as effectively as possible pulled it right to the heart of the Navy's logistics oversight system and associated data systems. FIRST requires the continuing close participation of Navy logisticians to ensure that it grows in the right directions as experience accumulates.

Similar issues will be important to the Groundbreaker and Marine Corps food service programs. Even though NSA has attempted to delegate as much responsibility as possible to the Eagle Alliance and other supporting contractors, NSA's information service specialists will continue to play an integral role in defining and validating the requirements that the Eagle Alliance will service. These specialists must learn how to do this from a strategic perspective that focuses on how seat management of information services serves NSA's strategic goals, not on how the Eagle Alliance should provide seat management. This is a fundamental change in how government information service specialists normally think about their responsibilities. Similarly, DoD food specialists supporting the Marine Corps food service program must stand ready to validate the menus demanded from Sodexho, but must allow Sodexho to adapt DoD recipes to its cool/chill technology. As Sodexho introduces new menu items that sell well, Marine Corps food specialists must assess whether they can change their menu requirements while ensuring that the Marine Corps's strategic goals are met.

In general, the large acquisitions we evaluated made significant investments early on, expecting that actual use of the services over time would generate sufficient benefits to justify the early investments. These acquisitions involved considerable market research, public-private interaction, planning of processes and connectivity, and so on. They also illustrate two very different approaches to increasing the likelihood of the services' use.

cluded in the formal defense acquisition workforce. A broader set of career fields has been included over time. For details, see www.acq.osd.mil/ar/dawia.html and <http://www.acq.osd.mil/io/sc/dawia/> (as of 5 May 2003).

One approach is that of the Groundbreaker program, which centralized acquisition of non-core information services in its headquarters. Once this centralized approach was implemented, users literally had no choice but to use the Eagle Alliance as the authorized source. This strategy addressed the traditional decentralized nature of NSA and the high probability that individual parts of NSA would continue to make their own procurement arrangements even if Groundbreaker clearly benefited NSA as a whole. The FIRST program also falls in this group; it centralizes purchasing to ensure configuration control, visibility over inventory, and scale economies in purchasing.

The other approach, based on a traditional entrepreneur's stance, states that if the program builds a cost-effective service, the users will come and pay for it. R2CSR accepts users from all over the federal government, with their money. And R2CSR persists only if its users accept it as the best of a variety of alternatives available. The Marine Corps food service program creates a similar setting for Sodexho. It offers to give Sodexho's food away free to Marines willing to eat it, but those Marines have options and have opted to pay to eat elsewhere in the past rather than to eat for free. The Marine Corps food service program will be used only if it induces and allows Sodexho to offer a cost-effective service. BSC lives somewhere between these options: It is available for Army forces to use in the Balkans, but they are not required to use it. It will continue to be used only if it induces and allows KBR to offer cost-effective services.

OSD's Role

The acquisitions confirm the continuing importance of arguments that have been made before about how innovative services acquisition will affect DoD's workforce.²² These acquisitions confirm the importance of many new skills for the traditional acquisition workforce, as well as for many other parts of the DoD workforce. AT&L is not responsible for other parts of DoD, but as DoD's center of excellence

²² For a discussion and references, see Anderson, 1999.

on acquisition issues, it is the most logical place within OSD to emphasize the broader effects of services acquisition on the DoD workforce and to track those effects as they continue to evolve with services acquisition itself.

Coordinating DoD Manpower and Personnel Policies

The expansion of services acquisition has systematic effects on DoD manpower and personnel policy that have not been fully appreciated yet. On the manpower side, it changes the mix of skills required within DoD. It reduces the demand for manpower billets associated with managing people, because services acquisition pushes day-to-day labor management to external sources. Similarly, it reduces the demand for manpower billets associated with purchasing and managing durable equipment and consumables, because services acquisition pushes day-to-day ownership of assets and consumables to external sources. And the types of acquisitions we studied reduce the demand for manpower billets associated with transaction management and simple acquisitions, because these acquisitions operate at a program level and transfer most responsibility for transaction management to external sources. At the same time, expanded services acquisition increases the demand for manpower billets associated with linking external sources to internal users and verifying that DoD gets the best match between its strategic goals and the capabilities of its external providers.

On the personnel side, DoD has traditionally used day-to-day management of people and equipment to train its personnel for more senior positions, where personnel take on responsibilities for thinking more strategically about how to match users with the sources of services. DoD has traditionally used experience with transaction management and simple acquisitions as a training ground for more complex program management of service acquisitions. The change in manpower mix demanded by new acquisitions will prevent traditional DoD personnel management methods from being sustainable.

This mismatch between manpower and personnel policies was not perceived as a serious issue in any of the six acquisitions we evaluated, but it did come up in a few places. FIRST uses IPTs that include both Navy and Boeing personnel to manage all significant processes associated with the program. Interaction between Boeing and the Navy should help inform both sides about the other's priorities, thereby helping the Navy prepare personnel in the context of program management for increasing responsibilities within the program. FAST and R2CSR maintain professional acquisition organizations in which to train personnel over time. Again, the training will necessarily prepare organic personnel as program managers more than simply as acquisition personnel. The Marine Corps food service program deliberately retains junior organic personnel, but it places them directly in contractor-managed teams for training when they are not deployed. NSA does not expect Groundbreaker to raise this issue. It has retained so much technical capability in-house on activities outside the program that it expects to continue using its traditional personnel development programs.

In sum, none of the six cases gave high priority to this mismatch, but most had provisions to deal with it, provisions crafted to local needs.

OSD's Role

OSD policies affect the manpower mixes and personnel management programs relevant to large-scale services acquisition. Manpower mix and personnel management are directly relevant to the manpower requirements, experience levels, and skill mixes that AT&L uses to monitor the quality and morale of its workforce. As services acquisition continues to expand, it will inevitably have a growing effect on these measures of quality and morale.

Conclusions and Policy Implications

In this final chapter, we summarize the implications that the six acquisitions we reviewed have for OSD policy on services acquisition. We begin with general issues involving OSD oversight, then identify a set of more-specific policy issues likely to benefit from additional consideration by OSD. Finally, we present observations on recent and ongoing changes in the services acquisition policy of the federal government.

General Oversight Issues for OSD

The cases reviewed suggest that OSD can play three key roles in services acquisition policy:

- Set and monitor policies that link services acquisition effectively to DoD's high-level, strategic goals.
- Act as an intermediary between Congress and individual service acquisitions that interest Congress.
- Draw lessons learned from service acquisitions executed in DoD and distribute these through DoD to accelerate the implementation of effective, innovative methods of service acquisition and corresponding changes in the acquisition workforce.

Linking Services Acquisition Goals to DoD's Strategic Goals

As acquisition reform continues to transform the acquisition of services in DoD, traditional notions about what is appropriate or even acceptable to do in service acquisitions will inevitably come into question. The cases reviewed help illustrate how:

- Contract personnel can be motivated and flexible enough to support military personnel in contingencies in tasks that have traditionally been considered inherently governmental (e.g., BSC, FIRST).
- Contract personnel can perform tasks, such as performance oversight and auditing, traditionally considered inherently governmental (e.g., Groundbreaker).
- Contract and government personnel can deal with one another at less than arms length, throughout the course of a service acquisition, without compromising key protections emphasized in traditional acquisition policy (e.g., all cases reviewed here).
- Government can bundle activities, to take advantage of economies of scale and scope, and still preserve opportunities for small and disadvantaged businesses in the context of these bundled activities (e.g., FAST, Groundbreaker, Marine Corps food service, R2CSR).
- Government can limit private-private competition in acceptable ways to get access to higher levels of performance. In fact, by simplifying and accelerating such competition, government can expand its use and so expand the benefits that government gets from using competition (e.g., FAST, R2CSR).
- By using acceptable alternatives to the stilted mechanisms of traditional competitive sourcing, government can get access to capabilities that traditional competitive sourcing would effectively prohibit (e.g., Groundbreaker).
- Government can get high levels of service performance from mechanisms that do not conform with the FAR definition of PBSC (e.g., Marine Corps food service).

Such change will continue as long as reform continues, and OSD can help facilitate and coordinate the debate about what DoD really wants in services acquisition. What priorities applied in specific service acquisitions are most compatible with DoD's high-level, strategic goals? The metrics that OSD uses to monitor service acquisitions should evolve as this debate continues to evolve.

Managing Congressional Concerns About Services Acquisition

Congress has been and will continue to be drawn into the design and management of service acquisitions in DoD. Congress appears most likely to get involved if a DoD service acquisition injures or appears to injure a member of a politically powerful constituency. Acquisition issues that have drawn particular interest in recent years include the following:

- Bundling work previously performed by small businesses without giving them opportunities to perform portions of the bundled workload (e.g., FAST).
- Outsourcing work performed by government civilians without giving them adequate opportunity to fight for that workload (e.g., Groundbreaker).
- Using a source selection that appears to exclude potential providers, with appropriate qualifications, from having full and open access to government work (e.g., recent concern about Halliburton contracts in Iraq).

Congress may also get involved if management problems in an activity persist, as was the case at NSA. This kind of concern could affect service acquisitions if the management problems themselves arise within a service acquisition (e.g., BSC) or lead repeatedly to problematic acquisitions, or if an individual service acquisition is a key element in an agency's efforts to resolve its management problems (e.g., Groundbreaker).

To the extent that OSD can anticipate events or decisions in DoD service acquisitions likely to interest Congress, OSD can either intercept these events or decisions, preventing them from occurring

before they draw congressional interest, or build expertise in dealing with congressional queries when they come. OSD can intercept problems preemptively by learning from past interactions with Congress and using the lessons developed to help the DoD components stay out of trouble. OSD can manage problems when they occur by developing methods to produce data demanded quickly and proposing adjustments that have satisfied Congress's concerns in the past. When OSD determines that it is appropriate to challenge Congress on a services acquisition issue, it can have in hand a good understanding of how Congress will react and what actions DoD can take to prevail. Such capabilities will not eliminate trouble with Congress, but they should ease OSD's relationship with Congress.

Congress is more likely to notice large service acquisitions, because they are more likely to have a significant effect on congressional constituents and because they are more likely to present management problems with dollar values worth congressional attention. OSD asked the RAND Corporation to provide any evidence developed on size thresholds that OSD could use to define different degrees of oversight for acquisitions of different sizes. A sample of six does not lend itself to such a task—in all likelihood, specific aspects of such a small set of acquisitions will affect their relevance to OSD more than their size does. For the record, that is what we found with these six acquisitions. The very nature of these contracts makes it hard to measure their effective size. They currently vary from about \$110 million to over \$1 billion a year in size, and from five to ten years in duration, but some will surely grow. Within this range, we saw no indication that larger size or longer duration somehow justified additional OSD oversight. A much larger sample would probably yield a different answer.

Developing and Disseminating Lessons Learned

DoD services acquisition has just begun to reflect insights from best commercial practice, and experimentation and learning can be expected to continue for the foreseeable future. As evidence accumulates on the positive and negative effects of new practices applied in a defense setting, OSD is the natural place to collect this evidence, assess

it, and shape it into lessons relevant to practices for future service acquisitions. The individual components can do this as well, but they often do not communicate well with one another on issues of mutual interest. The services in question and the acquisition issues they raise tend to be common across most of the DoD components. OSD can help ensure that all parts of DoD benefit from accumulating services acquisition experience everywhere in DoD. Among the effects of interest will be congressional responses to new practices. OSD can monitor these with special interest, anticipating its continuing role as a facilitator between Congress and the DoD components. Effective distribution today of lessons learned about Congress should simplify OSD's role in the future.

Lessons learned are highly likely to include implications for skills relevant to the DoD acquisition force. The first lesson, of course, is that the workforce should be viewed to include all DoD personnel involved in service acquisitions, not just contracting professionals. All relevant DoD personnel should receive information on effective services acquisition as it evolves. And training and personnel management policies should evolve to ensure that DoD personnel have the skills required to take full advantage of the lessons learned flowing from ongoing service acquisitions. OSD has an integral role to play in pushing new information into DoD training and personnel management programs for relevant personnel and adjusting these programs as appropriate over time.¹

Specific Substantive Policy Issues for OSD to Consider

As OSD pursues the broad oversight roles described above, services acquisition is likely to raise a series of more specific challenges. OSD can expect these challenges to arise repeatedly as it clarifies links between DoD's strategic goals and its goals for services acquisition,

¹ This study did not focus on training and personnel management issues. But information collected from the six study cases is compatible with findings and recommendations reported in Anderson, 1999.

manages the components' relationships with Congress with regard to services acquisition, and seeks to develop and disseminate lessons learned from ongoing experiments in services acquisition.

Criteria Other Than Cost

The acquisitions we reviewed all rely heavily on criteria other than cost to define the contractual terms relevant to executing their contracts. Those that used competitive source selections all relied heavily on non-cost criteria in those source selections. Criteria other than cost are essential to efforts (like those reviewed here) to build longer-term relationships that give providers enough discretion for DoD to benefit from their various commercial capabilities. They will likely prove critical to the success of DoD's efforts to expand the use of PBSC, since successful PBSC arrangements rely heavily on the quality of a provider. Despite the growing importance of non-cost criteria in services acquisition, however, Congress continues to prevent their effective use in public-private competitions and, in its most recent action on services acquisition in DoD, the NDAA for FY 2002, still emphasized the importance of cost savings as a measure of success. DoD's 5000-series acquisition documents recognize the importance of non-cost criteria to services acquisition. DoD must ensure that specific service acquisitions benefit as much as possible from the use of such criteria in source selections and performance agreements.

Support of Contingencies

Recent events associated with 9/11 and the wars in Afghanistan (2001–2002) and Iraq (2003) illustrate how volatile the global political-military environment is today. As DoD continues to outsource and bring contract services closer to the warfighter, it will need to give more and more attention to building contractual relationships flexible and responsive enough to succeed in the global environment. The acquisitions we reviewed illustrate how to build broadly flexible arrangements (BSC, FAST, R2CSR) and arrangements with specific terms that allow goals and incentives to change during contingencies (FIRST, Marine Corps food service). They also caution that flexible arrangements pose control issues. DoD must decide how much it is

willing to pay, in dollars and performance, for flexibility and responsiveness in service acquisitions.

Treatment of Small and Disadvantaged Businesses

The most persistent issue identified in the six acquisitions is probably the treatment of small and disadvantaged businesses. Such businesses have traditionally provided much of the contract service support DoD receives, especially for less complex activities. But commercial practice is increasingly demonstrating the economies of scale and scope and the improvements in contractor alignment and accountability that are available from bundling contracts. DoD will continue to increase its use of bundled services. The acquisitions reviewed (especially FAST, Marine Corps food service, R2CSR) illustrate that the success of this trend depends on Congress and the advocates for small and disadvantaged businesses being fully engaged and satisfied with the bundling plans devised. The cases illustrate techniques available to provide attractive opportunities for small and disadvantaged businesses within bundled activities—for example, set-asides for small businesses acting as prime contractors for bundled services, subcontracting set-asides within bundles, mentoring relationships between large primes and small and disadvantaged subcontractors to help the subcontractors grow, and improved methods for ensuring timely payment of subcontractors. They also illustrate the importance both of screening small and disadvantaged businesses carefully to ensure they can operate effectively within a bundled service agreement and of integrating them effectively into the bundle.

Public-Private Partnering

New ways for DoD to partner with contractors during execution of contract services came up repeatedly in the acquisitions studied; for example:

- Participating in ongoing operational support planning activities (BSC, FIRST).
- Integrating DoD and contractor portions of an end-to-end value chain under a contractor's control (FIRST).

- Providing on-the-job training to government personnel in contractor-operated settings (Marine Corps food service).
- Auditing contract performance (Groundbreaker).
- Marketing a government service to other government organizations (FAST, R2CSR).

These are just some of the wide variety of opportunities likely to be available, each of which will depend on the particular circumstances of the service acquisition. Because these push the envelope of accepted federal acquisition practice, however, they are likely to draw particular attention and to benefit from careful review.

Treatment of Displaced Government Civilians

Growing outsourcing of services will increasingly displace government civilians. When DoD outsourced in the past, it could typically give its displaced employees the opportunity to take a position elsewhere in DoD, because the number of displaced billets was small relative to total DoD billets or even turnover in personnel filling those billets. If competitive sourcing and other initiatives continue to outsource billets at current rates, DoD will no longer be able to provide the same protection. OSD will need to pay increasing attention to how DoD protects displaced civilians. This was an important issue in only one of the cases reviewed (Groundbreaker), but this one offers a useful object lesson on what is involved.

Barriers to Innovation in Services Acquisition

As acquisition reform exploits new opportunities, new barriers come to light. Congressional requirements to maintain different “colors of money” limit DoD’s ability to hold contractors accountable for cost-effective trade-offs (FIRST, Marine Corps food service, R2CSR). Current DoD interpretations of commercial pricing force the use of firm-fixed prices for acquisitions of services that real commercial firms would use cost-based pricing for (BSC). This is likely to raise long-term costs to DoD by forcing contractors to bear risks they can-

not control effectively. The mechanics of OMB Circular A-76² make it difficult or impossible to structure acquisitions that dramatically change how work scope is specified (Groundbreaker). These policies will continue to inhibit the gains of acquisition reform unless OSD can find ways to adjust their application in DoD.

Comparison with Recent Services Acquisition Policy Initiatives

The policy implications of the large service acquisitions we evaluated are broadly compatible with those of two recent initiatives relevant to DoD services acquisition: the "Acquisition of Services" Review Process that AT&L devised in 2002 to implement Sec. 801 of the NDAA for FY 2002;³ and the Services Acquisition Reform Act, H.R. 1837, that Congressman Tom Davis introduced into the House of Representatives Government Reform Committee in April 2003 (SARA II).⁴ In sum,

- Both favor efforts to tailor arrangements in large acquisitions so that provider capabilities are as closely aligned as possible with DoD's strategic goals.
- Both favor efforts that encourage the DoD components to innovate in ways that advance this alignment. H.R. 1837 offers a variety of specific adjustments in the application of the FAR that are designed to do this, even though doing so alters the federal government's traditional views on integrity, equity, and efficiency. The acquisitions we reviewed suggest that the adjust-

² Office of Management and Budget, 1999.

³ U.S. Department of Defense, 2003c, Enclosure E8; Aldridge, 2002; Office of the Under Secretary of Defense (AT&L), 2002. This last document, "Review of Department of Defense (DoD) Acquisition of Services," implements Sec. 801(d) of the NDAA for FY 2002 (P.L. 107-107).

⁴ Full text available at <http://capwiz.com/govexec/webreturn/?url=http://thomas.loc.gov/cgi-bin/query/z?c108:H.R.1837>; on 12 May 2003.

ments will succeed only if the new training envisioned in H.R. 1837 is properly framed.

- The AT&L process highlights the importance of giving OSD better oversight on a short list of special-interest issues very similar to those identified here.
- A potential source of future difficulty is that the definition both initiatives use for PBSC differs from the standard definition in FAR Part 37.6. Their definition could potentially give the government far more control than either initiative intends over how a contractor provides a service, and more control than the acquisitions we reviewed might conclude was compatible with the best alignment between DoD's strategic goals and provider capabilities.

Basic Questionnaire Used to Structure Interviews

1. What are the basic facts about this service acquisition?
 - 1.1 Specific activities covered by the acquisition—scope, location, scale, etc.
 - 1.2 High-level agency goals formally identified to motivate the need for the acquisition
 - 1.3 Specific net benefits expected from the acquisition
 - Improvements in the acquisition process itself
 - Improvements in leadership focus
 - Improvements in the quality of service, technology, cost, flexibility, etc., offered to the ultimate customer
 - Other?
 - 1.4 Process used to decide to outsource; substantive basis for this decision
 - 1.5 Broad acquisition strategy, including any formal risk assessment or risk mitigation plans
 - 1.6 Content of the statement of objectives or government-written performance work statement
 - 1.7 Source selection process, criteria, and substantive basis for decision
 - 1.8 Contractual form and key terms

- 1.9 Quality assurance plan and oversight program, including any award fee or term, incentive fee, and user's internal organization
- 1.10 Other relevant facts (e.g., related acquisitions, market context)?
2. How much oversight has OSD had of this acquisition? List specific elements of oversight. What have been the goals of the oversight? Relative to these goals, has it been effective?
3. To what extent was the decision to outsource or competitively source an activity driven primarily by
 - 3.1 The government's inability to attract and retain the personnel required to perform the work in-house?
 - 3.2 Endstrength constraints on organic labor that force the government agency to use external sources to execute its mission?
 - 3.3 Externally imposed outsourcing or competitive sourcing goals or targets?
4. Does the acquisition address the following concerns, which are relevant to OSD? If so, how?
 - 4.1 Effective protection of key government roles and responsibilities
 - Maintenance of inherently governmental responsibilities and core functions in-house
 - Maintenance in-house of skills required to manage the service acquisition process end-to-end
 - Ability to replace a source quickly if it demonstrates that it cannot perform a task as expected
 - Maintenance of secure communication and decisionmaking
 - Others?

- 4.2 Early identification and resolution of basic risks relevant to high-level goals
- Technical performance: Early and accurate identification of the level of technical performance to be expected
 - Management performance: Early and accurate identification of the level of management performance to be expected
 - Schedule: Early and accurate identification of the schedule of performance
 - Cost: Early and accurate identification of likely government resource commitments (dollars, government furnished materiel and equipment, oversight, etc.) through the course of the acquisition
 - Provisions for quick changes in work scope
 - Provisions for quick recovery from failure to perform
 - Others?
- 4.3 Effective exploitation of opportunities created by recent and ongoing improvements in government services acquisition
- General change in emphasis from risk minimization in the acquisition process to risk mitigation and management to help a customer achieve its core goals
 - Use of government integrated process teams to align and accelerate all steps in the acquisition process
 - Improved market research
 - Increased interaction between the government and potential offerors early in the acquisition
 - Greater use of best commercial methods and standards (e.g., single process initiative, reduced reliance on MILSPECs, process vs. individual task emphasis in quality assurance [QA])
 - Acquiring services directly rather than buying assets used to provide these services

- Use of FAR Part 12 and other methods to simplify acquisition
- Best-value competition
- Effective use of past performance in source selection
- Performance-based statements of work
- Change in emphasis for performance management from QA surveillance to partnerships that jointly resolve problems
- Effective interconnection between government and provider in planning, information systems, personnel contact and exchange, etc.
- Other improvements made possible by acquisition reform (name them)

4.4 Continuing protection of basic administrative law and socioeconomic goals

- Effective compliance with the Federal Acquisition Regulations
- Protection of displaced government workers
- Appropriate maintenance of competition
- Maintenance of an effective industrial base for the services needed
- Appropriate treatment of small and disadvantaged business concerns
- Others?

5. Relative to the goals stated for the acquisition, how well is it performing in implementation?

5.1 Performance of the acquisition process itself

5.2 Effective provision of services to the ultimate user

6. What lessons learned, relevant to high-level policymakers, have emerged from the acquisition?

7. What other issues have arisen during the acquisition that have potential implications for higher-level policy adjustments?

Guide to Case Study Materials

Appendices C to H summarize, respectively, material we collected on each of the six case studies. To simplify comparison across cases, each appendix is structured as follows:

- Services involved and key players
- Key dates and dollar size
- High-level policy goals that motivated the creation of the program
- Socioeconomic goals
- Other general information
- Key steps in acquisition
 - Beginnings
 - Outsourcing issues
 - Source selection
 - Contract type and terms
 - Execution
 - Follow-on

Balkans Support Contract¹

Services Involved and Key Players

The Balkans Support Contract (BSC) provides a broad range of base operating support, logistics, life support, and other services to Army forces and selected other U.S. and international organizations in the Balkans. Representative examples of the services involved are as follows:²

- Management and administration
- Government property management
- Camp maintenance
- Road maintenance
- Equipment and vehicle maintenance
- Supply and transportation services
- Food, water, laundry, and mail services
- Hazardous waste management

In addition to these activities, which are included in the basic work scope, the contract includes a broader “be prepared for” list of activities that the contract would address if called on. They include

¹ This description benefits from related, unpublished RAND research by Victoria Greenfield on performance and risk management in BSC.

² Based on statement of work in Balkans Support Contract Request for Proposal, 1998.

activities related to redeployment, retrograde, and environmental restoration, among others.

The U.S. Army Corps of Engineers (USACE) administers the contract, the Defense Contract Management Agency (DCMA) provides administrative contract support in theater, and the U.S. Army in Europe (USAREUR) funds the contract and acts as the primary customer. Forces deployed to the Balkans for six months at a time actually consume most of the services provided; Kellogg Brown and Root (KBR), a subsidiary of Halliburton, provides services under BSC.³

Key Dates and Dollar Size

KBR began to support the Army in the Balkans in late 1995 under the Logistics Civil Augmentation Program (LOGCAP) contract then in place. When the first LOGCAP contract ended in 1997, KBR support in the Balkans continued under a two-year, sole-source contract. The current five-year BSC contract was awarded in 1999 as the result of an open competition. Serious work on an acquisition to follow BSC in 2004 began in early 2003.

The Army adjusts dollars on BSC repeatedly as new requirements are validated and placed on this particular contract vehicle. Hundreds of changes had occurred by 2003. In 2003, USACE forecast the total value of BSC through all of its option years to be about \$2.1 billion, but carefully noted that the final value could be quite different, depending on how actual workload plays out. Table C.1 summarizes the actual annual size of the contracts under which KBR has supported the Army in the Balkans.

³ KBR was called Brown and Root Services when the contract began. This discussion uses the name KBR throughout for simplicity.

Table C.1
Total Contract Costs for Balkans Support Contract

Fiscal Year	\$ Million
1999	410.5
2000	454.8
2001	415.5
2002	318.4
2003 (estimated)	273.3
2004 (estimated)	232.5
Total	2,105.0

SOURCE: U.S. Army Corps of Engineers, Transatlantic Programs Center, May 2003.

High-Level Policy Goals That Motivated the Creation of the Program

The goals for BSC are inextricably linked to those for LOGCAP.⁴ Under LOGCAP, the Army sought an ability to call on contract sources of support services, as needed, to support contingency operations. Such contract sources could offer the Army at least two major advantages. First, because large portions of the Army's organic capability to provide combat service support lies in its reserve components, being able to use a contract source for such services would allow the Army to deploy without mobilizing troops from its reserve components. Second, to the extent that the Army could hand off the details of providing a significant portion of combat service support to a single contract provider, the Army leadership in theater could effectively "get out of the business" of managing such services on a day-to-day basis. By getting out of micro management, it could focus on the strategic issues of integrating combat service support with the core mission in theater, which the Army would continue to pursue with organic capabilities. This second potential advantage is the classic ra-

⁴ For the Army regulation that defines the role of LOGCAP, see Headquarters, Department of the Army, *Logistics Civil Augmentation Program (LOGCAP)*, 1985.

tionale behind much recent outsourcing: It allows organizations to gain strategic focus on their own core competencies.

These rationales motivated the Army to turn to the LOGCAP provider, then KBR, for support when it entered the Balkans. As the Army remained in the Balkans and BSC itself began, five additional high-level goals became important. First, KBR proved itself capable of providing high-quality support in the Balkans with limited Army oversight. Because the contract actually allowed the Army to get out of the business of managing activities under the contract on a day-to-day basis, USAREUR progressively used the contract to provide an increasing number of services. Second, as deployed forces rotated through the Balkans on a regular cycle, a stable support program managed by KBR ensured the continuity required to support these troops without requiring them to ramp their own support services up and down as they came and went. Third, this continuity allowed KBR to rely effectively on local sources for labor and material, pumping much needed cash into the local economies and thereby supporting U.S. diplomatic goals in the region. At the same time, the contract provided a single focal point that the Army could hold accountable to ensure that all local purchases were aligned with the Army's military goals in theater. Fourth, a presidential troop ceiling limited U.S. military presence in theater. By substituting KBR personnel for military personnel, the Army could focus its military capability on military-unique tasks and accomplish more in theater than it could if it were required to commit military personnel governed by the ceiling to support services. Finally, high operational tempo in recent years has hurt retention throughout DoD. BSC helps mitigate the high-level problem by (1) reducing the stress on military personnel by reducing their requirements to deploy and (2) providing high-quality support in the Balkans for the troops who do deploy there.

Low cost was not a priority in the Army's use of BSC until congressional attention identified specific opportunities to reduce costs and more general opportunities to alter oversight mechanisms to en-

courage greater cost control.⁵ The Army responded by giving cost higher priority in the execution of BSC, especially in performance evaluations, and in the initial acquisition planning for the follow-on to BSC.

Socioeconomic Goals

Almost all BSC work occurs outside the U.S. A small amount of planning and management work occurs at the KBR corporate headquarters in Houston, Texas, but this accounts for a small share of total spending on the contract. As a result, the socioeconomic issues relevant to this acquisition are quite different from those confronted in the other acquisitions reviewed in this study. Treatment of small and disadvantaged business was never a primary issue in the acquisition, although the contractor was required to provide a plan for addressing this issue.⁶ More important have been issues associated with fair access to government procurement opportunities and status of forces agreements (SOFAs).

Any large umbrella contract is bound to draw criticism from other companies that believe they can provide the services covered by the contract. Because the work scope for BSC is the product of a never-ending series of incremental decisions about who should provide specific services, the issue of fair access to workload can arise throughout the contract's life. BSC addresses this issue in two related ways.

First, the contractual agreement *guarantees* little workload, in terms either of dollar levels or types of work, to KBR.⁷ Rather, BSC creates a framework that USAREUR can use to decide what forms of work it wishes to perform under the contract. BSC is only one of

⁵ GAO, 2000.

⁶ See FAR Part 19 for details.

⁷ BSC has a \$10 million minimum guarantee of work for the basic contract period and \$250,000 for each additional option period. This is trivially small relative to the total level of contract workload in the Balkans.

many contracts that the Army uses to buy services in the Balkans. It is the largest U.S. government contract in the Balkans but accounts for less than 10 percent of total U.S. government contracting in theater.

Second, USAREUR uses formal, documented methods to make source selections on all significant additions to BSC in theater.⁸ Joint acquisition review boards (JARBs) must review most significant proposals, generally defined as proposals for services estimated to cost \$2,500 or more. For any potential addition under their purview, JARBs “validate the requirement, make a source selection to result in the best value for the United States Government, . . . ensure that inappropriate or unauthorized purchases are not processed, . . . [and] document the validation and source selection process.” JARBs use a formal source selection process, tailored to the size and complexity of each addition, to decide who should provide the activity. Options include but are not limited to “Host Nation Support, Troop Labor, Local Purchase through the Joint Contracting Center (JCC), Balkan Support Contract, USAREUR Engineering Logistics Center, . . . [and] Army Materiel Command Logistics Support.”⁹ Members of a JARB include the senior logistics, public works, operations and plans, and resource management staff personnel for the area support group (ASG) and the task force it supports. A representative from the JCC and the DCMA administrative contracting officer must be present at every JARB meeting. The ASG commander is the approving official for BSC requirements costing \$25,000 or less; the task force commander is the approving official for requirements costing \$25,000 to \$50,000. HQ USAREUR must approve all additions costing \$50,000 or more and any additions that involve recurring services. These methods are designed to ensure that the Army uses BSC to perform new work only when it provides the best alternative available in theater at the time.

⁸ Information in this paragraph comes from USAREUR, n.d.

⁹ Although the JARBs and JCC are called *joint*, they are creatures of USAREUR, not the U.S. European Command (EUCOM).

Among many other things, SOFAs define the terms on which contractors can work in theater to support Army forces. The U.S. government must negotiate the specific terms of a SOFA with each country in which a contractor works and then designate the status of contractors relative to the terms negotiated. The status of contractors is sensitive for three reasons: because they may compete for work with host-nation government and nongovernment sources, because their income and property are potentially taxable sources of government revenues, and because their activities may be subject to local regulations. Since KBR uses a unified management structure and plan to support the Army in several different Balkan countries, SOFAs consistent with a unified support plan are particularly important to the success of BSC.

When KBR first arrived in the Balkans, full arrangements with regard to SOFAs were not complete. As a result, KBR activities were subject to local taxes that significantly increased the cost of support operations to the Army. KBR activities were also subject to restrictions at each international border, restrictions that severely limited KBR's ability to implement modern time-dependent logistics methods. SOFAs ultimately allowed the Army to treat KBR as "part of the force" and thus subject to the same local rules that applied to military personnel. This eliminated local taxes on KBR activities (paid by the Army) and simplified Army use of BSC when agreement was achieved.

Key Steps in Acquisition

Beginnings

LOGCAP began as a planning concept in 1985. USACE transformed it into an umbrella contract in 1992, using a competition to select KBR as the provider of planning activities and then, later, support for a series of contingencies around the world. One contingency was in the Balkans. KBR produced high-quality services under the contract, getting high marks on customer satisfaction, but some observers

thought the contract was too costly. Given its own close operational support of military forces through weapon system programs, Army Materiel Command (AMC) argued successfully that it was better suited to manage LOGCAP than USACE was. AMC took control of LOGCAP in 1996 and organized the recompetition in 1997, which drew many offerors. DynCorp won.

When KBR's role in LOGCAP ended in 1997, the Army's future in the Balkans was unclear. USAREUR wanted to maintain continuity in its contract support until the longer-term nature of the mission became clearer. To maintain continuity, USACE used an integrated process team, with representatives from all involved parties, to craft the sole-source, two-year Operation Joint Forge Sustainment (OJFS) contract with KBR, which continued to provide the services it had provided under LOGCAP, using similar guiding principles.¹⁰ By 1998, it was apparent that the Army was likely to remain in the Balkans for a long time. When this became clear, the Army began to make arrangements for a more permanent support arrangement. DynCorp argued that LOGCAP could provide that support on terms very similar to those already in place. USAREUR, however, chose to pursue a separate support contract administered by USACE. At that point, the current BSC began to take shape.

Source Selection

The Army involved potential offerors in the BSC acquisition early to ensure that they had the information about operations in the Balkans that they would need to prepare responsive offers. More than twenty firms, including companies like Fluor, Bechtel, Lockheed Martin, and Morrison Knudsen, attended the first pre-proposal conference. A much smaller group of potential offerors went "down range" to the Balkans to collect information. DynCorp was ever present, seeking to build a case that this workload belonged in LOGCAP. This brought

¹⁰ Victoria Greenfield notes that, in comparing the LOGCAP contract, the OJFS contract, and BSC, the U.S. Army Corps of Engineers (1999) finds that, "Excluding the worldwide planning portion of the LOGCAP contract, the scope of work and procedures are nearly identical for all three contracts."

congressional attention to the program but never posed a serious problem. A serious problem did arise, however, when potential offerors wanted information that KBR considered proprietary. The Army provided output-oriented measures of workload (e.g., a complete [600 page] property listing, the number of troops to be supported, lists of all the outputs KBR had produced), but nothing about the resource requirements or costs associated with executing those workloads. Because of KBR's deep knowledge of the operation, some potential offerors thought KBR had an unfair edge in the competition.

The competition itself was a best-value competition that considered four major factors: management/execution plan, experience, past performance, and cost. It gave equal weight to the first three and weighted them together as being significantly more important than the cost factor. An assessment of performance risk was embedded in each factor. The cost factor included not only cost "overall reasonableness" but also the realism and completeness of costs and the offeror's financial capability. So the competition heavily discounted the actual level of expected cost as a discriminating factor. The competition defined experience in terms that gave particular emphasis to the Army's operations in the Balkans. It highlighted experience with "broad-spectrum logistics support to deployed military forces or remotely stationed customers and/or at multiple sites, . . . operation and maintenance of military infrastructure, the design and performance of minor construction and repair projects, . . . [and] contracts in Europe and especially the Balkans region," among other things.¹¹ With KBR's experience, globally under LOGCAP and under the OJFS contract in the Balkans, no other offeror could present as much experience, defined this way, as KBR.

In the end, most potential offerors, including DynCorp, concluded that they could not beat KBR. Only one other firm made an offer, and its proposal did not have enough detail to allow the Army to assess the realism of its costs or the adequacy of its technical proposal. KBR, on the other hand, submitted a strong, low-risk proposal.

¹¹ Balkans Support Contract Request for Proposal, 1998.

The Army especially liked KBR's logical presentation of the work breakdown structure, with lists of management, key players, etc., for each activity covered; execution plan; manpower utilization plan; plan to use customer surveys for quality control; and plan for responding to surges. These in fact reflected KBR's deep understanding of the BSC workload and its experience working closely with the Army for many years, in the Balkans and elsewhere. Despite earlier controversies, no protests occurred.

The selection process included participants from USACE, USAREUR, and DCMA. To prepare them for their responsibilities, the Army gave members of the source selection evaluation board special training on best-value practices and standards for evaluation.

Contract Type and Terms

The general contract work scope is defined by major geographically defined task orders (TOs) broken down into broadly stated work breakdown structures (WBSs) that state what activities KBR can undertake. The contract is designed to allow repeated, quick adjustments in scope within this structure. These occur within WBS elements by redefining the specific tasks covered under each element. The WBS itself has remained fairly stable over the course of the contract.

BSC is an indefinite delivery, indefinite quantity (IDIQ) performance-based service contract. Price equals allowable cost plus a 1 percent base fee plus up to an 8 percent award fee, determined three times a year. The fees are percentages of a negotiated budget.¹² USACE determines the award fee based on a recommendation and input from an award fee evaluation board comprising members from HQ USAREUR, USACE, DCMA, and others as appropriate.¹³ The board gathers input from all players associated with the contract, including USAREUR, the deployed task forces, USACE, DCMA, and

¹² The formal basis for the fee is not, as is sometimes claimed, actual cost. It is a budget level that reflects expected cost when the basis is negotiated.

¹³ Balkans Support Contract Award Fee Evaluators Handbook, n.d.; "Balkan Sustainment Contract Award Fee Performance Evaluation Report Procedures," 2002.

KBR. USACE deliberately made a large portion of the fee subject to the award process and prevented competitors from offering lower awards fees in the source selection to intensify the incentives for high-quality performance.

The award fee looks at the TO/WBS structure and asks how well the contractor is executing against the plan. The criteria for the award fee effectively define the Army's priorities over the course of the contract. They are¹⁴

- Funds management and cost control. Ability to control, adjust, and accurately project job costs. Efficient use of inputs. Cost reductions through new initiatives, cost savings programs, cost avoidance programs, more economical labor mix, using the government supply system, and other methods. 40 percent weight.
- Performance. How well the contractor performed specific tasks. Adequacy of quality control, appearance, thoroughness and accuracy, inspections and customer surveys, documentation, schedule compliance, anticipating and resolving problems, new initiatives that measurably improve efficiency, recovering from delays, workplace safety, information management, and other specified processes. 30 percent weight.
- Coordination, flexibility, and responsiveness. Planning, organizing, and managing all elements. Effective working relationship with government personnel. Information on plan to execute assigned tasks. Adequacy of execution. Recognition of critical problem areas. Flexibility, timeliness, responsiveness in solving problems and meeting stated requests. Response to emergencies and other unexpected situations. Management actions to achieve and sustain a high level of productivity, utilization of technology and personnel, labor relations. New initiatives to improve efficiency. 30 percent weight.

¹⁴ Balkans Support Contract Award Fee Determining Plan, 2002. As discussed below, these criteria and weights differ in important ways from the criteria used at the beginning of the contract.

Execution

When BSC began, the Army funded it using supplemental funds. Even though the Army created BSC because it expected a continuing workload in the Balkans, it could not predict the level or mix of that workload and relied on supplemental funds to become available when the demand in theater was better known. In FY 2002, however, the Army moved funds for BSC into USAREUR's budget. USAREUR is now responsible for predicting BSC-related needs in theater and programming and budgeting for them. USAREUR can still request supplemental funding to meet unanticipated needs. Other customers transfer their funds to USAREUR so that they can be applied to the contract. Some other customers pay in kind, creating unique accountability problems.

When USAREUR funds BSC as a part of its normal Operations and Maintenance Army (OMA) budgeting, BSC funding can become fungible within USAREUR. The award fee evaluation board and fee-determining official must be vigilant to ensure that the award fee is not inappropriately reduced to release funds committed to BSC for use elsewhere in USAREUR.

Because OMA funds BSC, BSC has faced limitations on the types of investments it can make. For example, military construction (MILCON) funds are used to construct permanent structures whereas OMA funds can be used to construct only temporary structures. This limitation initially constrained the quality of construction in the camps KBR built for deployed troops. Over time, the interpretation of "temporary" adjusted from meaning structures "of a temporary nature" to meaning "structures intended for temporary use," mitigating the limitation. Concerned by the consequences of limits on the use of OMA funds that he saw during a visit to sites supported by BSC, a congressman created an emergency MILCON account. In practice, this additional "color of money" in theater has complicated accounting and investment planning. Nonetheless, Army and KBR managers have found ways to work around the negative effects of these limitations.

Administratively, the contract is organized around TOs, each of which covers all activities in one geographic area, most often a coun-

try, for one fiscal year.¹⁵ Through FY 2003, BSC had 47 TOs. TOs for FY 2003 covered operations in Houston, Hungary, Bosnia, Kosovo, and Macedonia. The contract manages the WBSs associated with each of these TOs and implements contract changes through the WBSs.

Changes in the contract emerge from a quick, iterative process. The Army and KBR can exchange ideas on the best way to address a new Army requirement. The cost-based contract treats KBR's costs for such efforts as allowable. As part of this effort, KBR produces a rough-order-of-magnitude cost estimate, which the Army can use for decisionmaking.¹⁶ In this effort, two parts of the Army must typically reach common ground—USAREUR, which will pay for the change, and the deployed task force, which will benefit most directly from it. When the idea is complete, the JARB or HQ USAREUR validates the requirement and verifies that BSC should pursue it. At this point, the Army issues a notice to proceed and an undefinitized change order, which together initiate the change and the paper trail that ultimately lead to a definitized change and a change in the cost basis for the contract, which affects the base and award fee. In the sequence, administrative processes are fast enough so that substantive planning and execution tasks normally drive the critical path for changes. Where the rate of change outruns authorization to act, KBR tries to facilitate change to maintain its reputation and ratings for responsiveness.

Over time, the Army has gained enough confidence in KBR to include it in integrated planning activities. This facilitates the Army's ability to communicate to KBR what it really wants and KBR's ability to inform the Army about what its capabilities are. Such communication supports responsiveness when the work scope changes and should allow more effective Army use of KBR's capabilities in theater. KBR works with USAREUR in this mode on an ongoing basis. It

¹⁵ Balkans Support Contract Standard Operating Procedures (SOPs) for Task Orders on Balkans Support Contract (BSC), 1999.

¹⁶ Balkans Support Contract Use of Rough Order of Magnitude Estimates, n.d.

contacts deploying units during the year before deployment to help them understand what support they will receive in theater and to prepare for their arrival in theater. KBR does not work with other Army contractors in theater in a similarly integrated fashion. Integration of contractors in theater operations occurs through the Army itself.

Despite being performance based and outcome oriented, the contract generates extensive data for the Army on how the contract is proceeding.¹⁷ In particular, it generates and broadly distributes a finely detailed daily situation report and a weekly summary at a TO/WBS level of detail, along with a dozen or more other reports. Extensive interaction occurs daily or at least weekly between KBR, DCMA, USAREUR, USACE, and the deployed task forces. Electronic data exchange makes data sharing easy. Broad distribution of data sustains a common operating picture, builds confidence, and supports mutual problem solving when difficulties inevitably arise. All of these players have different incentives; such data exchange supports objective resolution of disagreements that inhere in their relationships.

A 2000 GAO report on the BSC asked whether KBR was providing a cost-effective level of service.¹⁸ Using a small set of specific examples as a fulcrum for its argument, GAO concluded that the Army's statements of requirements to KBR were too broad, giving KBR too much discretion to define the tasks needed to meet these requirements. GAO recommended that the Army review the level and efficiency of recurring services more systematically, complete the setting of standards for the services that KBR provides, and take steps to improve contract administration in theater. The Army concurred and took these recommendations as a signal to adjust significant elements of the BSC and its administration. The Army unilaterally tightened the criteria for winning an award fee and changed them in

¹⁷ Balkans Support Contract CRDL Report Descriptions, n.d.; Balkans Support Contract CRDL Distribution List, 2002

¹⁸ GAO, 2000.

two important ways in 2002: The Army (1) increased the share devoted to funds management and cost control in the award fee from 30 to 40 percent and (2) changed the emphasis of the funds management and cost control component from effective prediction and management of predicted costs to cost reduction in each period. The Army tightened decision thresholds on new work to force reviews at higher levels and implemented a regular review of the level and efficiency of recurring work in coordination with the award-fee review cycle. It also scrubbed the standards it used to support requirements determinations in theater, addressing among other things, the standards in the "Red Book," which the USAREUR Deputy Chief of Staff for Engineering uses to maintain standards relevant to facilities in BSC.¹⁹ And the Army gave increased attention to fixed-price vehicles for incentivizing KBR to control and reduce cost.

These changes have given cost reduction much more attention, in the Army and in KBR, than might reasonably have been anticipated when BSC began. That said, there is a growing recognition in the Army that emphasis on cost and on fixed-price components normally increases as any workload matures and stabilizes. Based on experience in the commercial sector, many expect that cost reductions can continue indefinitely in a mature setting through exploitation of continuous process improvement.

Although BSC exists so that KBR can support the Army in theater, the Army must also support KBR in theater to ensure that KBR performs effectively. The most important aspect of this support is force protection, which can range from something close to standard security measures to something much closer to combat support in the midst of continuing ethnic feuding. In practice, KBR and the Army have renegotiated the level of the Army's responsibility repeatedly as the threat level and the troops available to provide force protection

¹⁹ Appropriate standards are a recurrent problem in Army contingency contracting, because they vary so much from one contingency to the next, based on funding available and local circumstances. They also vary across customers when BSC serves non-Army customers. For more information, see Headquarters, Army Materiel Command, *LOGCAP Battle Book*, 2000.

have changed. The Army can also provide a variety of other services associated with screening of foreign nationals working for KBR, personnel support, and access to common supplies and facilities.

“Color of money” has sometimes complicated program funding, but KBR has been understanding about delays. To fall within certain accounting mandates, programs sometimes require funding from particular accounts, making timely payment problematic. For example, Construction Operations and Maintenance Accounts are flexible but limited to expenditures of \$500,000 unless there is demonstrable danger to troops, at which point the limit rises to \$1 million. Ironically, this limit incentivizes the construction of many small camps—which each are under the required price ceiling, but which collectively are more expensive than a single larger camp would be—because additional restrictions surround larger allocations of resources.

Also, the differences required by regulations for use of “temporary” versus “permanent” construction accounts similarly lead to strained definitions for work projects, especially where the deployment is in some contexts referred to as merely temporary but experience suggests that long-term structures must be planned for and built.

Follow-on

USAREUR has approved continuation of BSC as a separate contract and approved a source selection for the follow-on contract in 2004. The commander of USAREUR preferred having USACE continue to administer the contract rather than administering it within USAREUR. LOGCAP was not considered as a source in the final decisionmaking.

The first public notification of the pending acquisition occurred when USACE issued a sources-sought solicitation in the Commerce Business Daily and dodbusopps.com website²⁰ in April 2003. The follow-on is proposed to cover support throughout Europe. Reacting to criticism from GAO and recognizing the growing maturity of the

²⁰ <http://www.dodbusopps.com/> was scheduled to transfer to <http://fedbizopps.gov> by the end of FY 2003. Many items are already at the latter site.

support mission in Europe, USACE intends the follow-on to rely more heavily on fixed-price and unit-price components for well-defined support activities.

Marine Corps Food Service Program

Services Involved and Key Players

Two (East Coast and West Coast) Marine Corps food service contracts, both awarded to Sodexho Management Inc., cover food service at all Marine garrison mess halls in the continental U.S. (CONUS). Sodexho Management Inc. is the U.S. subsidiary of a French firm, Sodexho Alliance SA. These contracts anticipate serving 27.5 million meals a year in six states (Arizona, California, North Carolina, South Carolina, Virginia, and Washington), making this the largest pure food contractual program ever awarded to one provider.¹ HQ U.S. Marine Corps, Washington, D.C., is the contracting activity.

Sodexho uses food purchased through standard defense purchasing channels and operates in each mess hall using government-owned facilities and equipment. The program covers the provision of food in each mess hall and (after the first year) the maintenance of government-owned assets used in the provision of this food. Sodexho owns and controls all assets not associated with individual mess halls.

Key Dates and Dollar Size

The Marine Corps awarded the contracts on 3 July 2002. If all options are exercised, the contracts will continue for eight years, until

¹ See Jenkins, 2002; Adams, 2001; "Daily Briefing," 2001; and Hedgpeth, 2001.

September 2010. Together, they have an anticipated value of \$881 million.² The East Coast contract is valued at \$454 million over its lifetime, the West Coast at \$427 million.³

High-Level Policy Goals That Motivated the Creation of the Program

The Marine Corps initially considered outsourcing services provided by military personnel and consolidating its contracts for mess hall services as a way to cut costs. A \$110 million wedge had been removed from its FY 1999 budget, and the Marine Corps saw the program described here as a way to help cover this wedge.⁴ As the acquisition went forward, the senior Marine leadership quickly realized that outsourcing would save money by cutting military endstrength. Like much of the rest of DoD at the time, the Marine Corps was becoming more concerned about using the military endstrength it had in the best way possible and less concerned about cutting operating costs. The primary motivation behind the acquisition shifted to looking for ways to get military personnel out of non-military-unique billets. The Marine Corps came to see this acquisition as part of a broader effort to replace military personnel with contractor personnel and to use the cost savings expected from using contract support to help pay for the additional personnel that would be required to provide contract support.

In the end, this effort was expected to allow the Marine Corps to divert about 600 Marines from food services to higher value mili-

² "Marine Corps Awards Contracts to Sodexo—Again," 2002; "Contracts: Navy," 2002.

³ "Contracts: Navy," 2002.

⁴ Financial managers use a "wedge" to force a reallocation of resources that reduces spending without specifying what the reallocation will be. In this case, the Marine Corps had to reduce its spending on activities that cost \$110 million to cover the \$110 million wedge imposed on it. The Marine Corps got to choose where specifically to cut its spending.

tary activities.⁵ Following this change, 2,070 Marines would remain in food services.⁶

Socioeconomic Goals

Mess halls have traditionally been a dependable place to meet targets for contracting to small and disadvantaged providers in DoD. Traditional food service lends itself to a small provider; simple tasks and skills have traditionally been well within the capability of a large number of small businesses in any market. In the past, the Marine Corps outsourced much of its mess hall food services workload to such providers, but its newly developed preference for regional providers overturned this model. Traditional providers of local food services simply did not have the capability to provide a regional service in a cost-effective way, because they did not use the industrial methods required to do so. As a result, the new contracts were going to displace opportunities for the Marine Corps's traditional small and disadvantaged providers.

The Marine Corps addressed this situation in two ways. First, it engaged the small and disadvantaged business community, including the National Industries for the Severely Handicapped (NISH), early in the acquisition. It presented its market research to advocacy groups to ensure that they understood that the Marine Corps would realize efficiency gains from the new approach (see below), that regionalization was not primarily a method for simplifying the administration of contracts, and that once the Marine Corps committed to such an approach, it could not justify creating set-aside prime contracts for small or disadvantaged providers, because such providers did not have the capability to respond.

Second, it protected small and disadvantaged businesses by ensuring opportunities for them as subcontractors under the program.

⁵ Adams, 2001.

⁶ Fuentes, 2002.

Drawing on the recent, successful resolution of similar issues in the Navy Marine Corps Intranet (NMCI) program, the Marine Corps developed a requirement that small business contractors receive at least 30 percent of the business associated with each contract. The buyer and provider expect this program to increase Marine Corps dollars going to small and disadvantaged businesses from the pre-contract levels; Sodexho expects it to double the number of disabled workers in the mess halls. Sodexho also expects affected advocacy groups to monitor the execution of the contracts closely and is preparing to keep them informed, in a proactive manner, about how the contracts actually affect their constituents.

This careful preparation early in the acquisition did not prevent protests based on these issues.⁷ But both the existence of the process and the objective information it produced helped the Marine Corps deal with these protests when they occurred (see below).

Sodexho's standard method for providing service at a location uses an integrated team of workers, but not all team members have to be Sodexho employees. In Sodexho's health-care business, for example, most personnel, including the managers, are typically on hospital payrolls. Sodexho is approaching its Marine Corps food service contracts the same way: Team members can be Sodexho employees, subcontractor employees, or even Marines (see below). Although Sodexho had not managed a 30 percent set-aside for subcontractors in its traditional commercial and education markets, teaming is common in those markets. Its team approach is well suited to using subcontractors as part of a closely orchestrated team. This approach is advantageous for the subcontractors engaged because it exposes them to new methods and helps them gain skills relevant to the broader food service market.

Given the close relationship Sodexho anticipates it will have with subcontractors at each site, Sodexho selects its subcontractors with great care, improving the likelihood of successfully integrated

⁷ Strong opposition to the program persists in Congress. It is one of ten large service contracting programs targeted for attention by Rep. Nydia M. Velásquez (see House Small Business Committee Democrats, 2002).

operations. Sodexho wants the Marine Corps to see at each location a seamless operation that has a distinct Sodexho mark. It thus seeks subcontractors it expects to be capable of delivering a seamless performance.

A completely unexpected socioeconomic issue arose during the first year of the operation of the contracts. As noted above, Sodexho is a French company.⁸ In response to intense French opposition to U.S. intentions in Iraq, in March 2003, Congressman Jack Kingston (R, Ga.) and 59 congressional colleagues “wrote Defense Secretary Donald Rumsfeld . . . urging him ‘to consider transferring this lucrative contract to a United States based firm’ and ‘send a tangible signal to the French government that there are economic consequences associated with their international policies.’”⁹ The Marine Corps had no interest in following such advice, and it would be legally difficult to do so. Nonetheless, the threat was plausible enough to “batter” Sodexho stock. This incident, though probably not relevant to the long-term performance of Sodexho’s Marine Corps food service contracts, raises a caution flag about relationships between DoD and non-U.S. service providers. Given increasing DoD commitments abroad, such a caution is particularly important today.

Other General Information

At the heart of the desirability of regional food service contracts is the practice of preparing foods centrally for distribution to and consumption at many different locations. To do this, Sodexho uses the cook/chill system, a

food cooking ‘manufacturing process’ that cooks food to a ‘just done’ status, then immediately chills it (but does not freeze it) for storage and reheating at a later time. . . . The primary differ-

⁸ About 38 percent of its employees are in North America, and 48 percent of its sales occur in North America.

⁹ Simpson, 2003.

ence of the cook/chill system compared to more common kitchen food preparation techniques is in the final cooking, chilling and storage methods. The goal is ideally to automate and control everything in these stages so that the prepared food manufacturing can occur as a steady process, rather than the more typical peak-and-valley method of most kitchens. This steady operation can fine-tune food quality through strict adherence to standardized recipes and procedures to ensure a consistent product.¹⁰

This technology is quite different from the local preparation of food used traditionally in DoD. It favors a large, technologically and logistically sophisticated provider. The Marine Corps views the standardization and systematic execution embodied in the cook/chill technology as an effective way to ensure consistent product quality.

Sodexho is an industry leader in using cook/chill technology, and one of its core competencies is designing recipes for execution in a cook/chill system. Sodexho has centralized its food preparation for East Coast Marine bases at its 90,000 square foot cook/chill plant in Nashville, Tennessee, where Sodexho can prepare up to 13 million meals per year (half of them using cook/chill technology) using only 45 employees. Legal Sea Foods and numerous hospitals and universities use this plant for large-scale catering and food service. Similar regional centralization will take place when Sodexho completes a West Coast plant in Las Vegas, Nevada.¹¹ Sodexho will use this West Coast plant to serve the Marine Corps and other customers in the west as Sodexho develops other relationships there.

Sodexho is the largest food services and management firm in the world. Its business is primarily in the commercial and education markets, but it has past experience with DoD gained on contracts with the Army, Navy, and Defense Logistics Agency (DLA) at the Kwaja-

¹⁰ "Cook/Chill Systems," n.d.

¹¹ "Marine Corps Awards Contracts to Sodexho—Again," 2002.

lein Atoll, Guam, Kosovo, South Korea, Ft. McClellan, Alabama, and Ft. Belvoir, Virginia.¹²

Key Steps in Acquisition

Beginnings

In the late 1990s, large food service providers such as ARAMARK, Compass, and Sodexho were exploring the federal market as a natural place to move beyond their traditional commercial and education markets.¹³ At the same time, fortuitously, the Marine Corps was seeking a fundamentally better way to feed Marines and cast a broad net in its market research on this topic. Marines visited Sodexho's Tennessee plant several times, beginning in 1999, in search of ideas, and the Marine Corps had experience with such a facility in Okinawa, which it used to feed all Marines there. Sodexho's approach in Tennessee showed how such an approach could be applied on a broader regional scale and how it could reduce labor requirements in individual mess halls. This second effect would be important to Marine Corps efforts to withdraw Marine food service workers from the mess halls.

Regionalization of Marine Corps food services presented challenges associated with determining what size was appropriate for each region, how to assess the production alternatives, how to meld commercial contracting methods with government practice under the Federal Acquisition Regulation (FAR), and, of course, how to protect small and disadvantaged businesses while taking full advantage of re-

¹² Frequently Asked Questions at <http://www.sodexhoUSA.com> (updated as of 24 May 2002); Matsumoto, 2002.

¹³ Matsumoto, 2002. According to Sodexho (<http://www.sodexhoUSA.com>, updated as of May 24, 2002), its interest in DoD business is part of a broader strategic vision: "There is a pronounced trend toward professional armies. In the countries where the trend first appeared, the United States and the United Kingdom, the rate of service outsourcing is the highest. Now that the trend has extended to other European countries, services that fall within Sodexho's areas of expertise will probably be outsourced in those markets as well."

gionalization. Sodexho expected a long acquisition process and made a strategic decision to invest in the Marine Corps acquisition, expecting that lessons learned there would be valuable with other federal customers. Other potential offerors do not seem to have appreciated the effort required as well, perhaps because their visions of how to change federal food service were not as aggressive.

Marine Corps requirements personnel talked to industry, including small and disadvantaged businesses, and the other armed services early in the acquisition to refine options. ARAMARK and Marriott looked at Marine bases to research what was needed. The Marine Corps held industry forums on both coasts and sent pre-solicitation draft statements of work to everyone involved to keep them informed.

Outsourcing

Although this program bundled Marine food services in CONUS into two large packages, it had only a limited effect on outsourcing. The majority of Marine Corps food service was already contracted out to small or disadvantaged firms, including NISH providers. Services at only about 12 mess halls were outsourced as part of the new contracts, and the outsourcing affected primarily military billets.

This program was not subject to the requirements of Office of Management and Budget (OMB) Circular A-76,¹⁴ because it displaced so few government civilian employees. As a result, the Marine Corps could use simple private-private competitions to choose providers for each region.

Source Selection

The Marine Corps had to resolve two key issues simply to frame the source selection:

1. **Number of contracts.** Market research, combined with information on the location of Marine facilities in CONUS, indicated

¹⁴ OMB, 1999.

that current best technological and logistics practice would allow two separate regions to service all Marine bases in CONUS. Best practice indicated that each could operate independent of the other. The eastern region covers 32 mess halls, the western covers 23.

2. **Length of the contracts awarded.** If a provider had to invest to service a Marine contract, the Marine Corps wanted to encourage that investment by giving the provider time to recover its investment. Contracting regulations allowed a base period of up to five years. The Marine Corps adopted that base period and added three one-year options to take advantage of the new system once it was up and running.

Neither of these decisions presumed that offerors would propose to use cook/chill systems; both simply sought to encourage offerors to bring appropriate new food preparation systems to the source selection in their proposals.

The Marine Corps ran each competition as a best-value source selection that considered four criteria: (1) realism and reasonableness of price, (2) integrated organization and management, (3) plan for using small and disadvantaged subcontractors, and (4) past performance. In both competitions, price was most important. The Marine Corps gave limited importance to past performance, because the services covered by this program were so much more complex than those attempted in earlier food service contracts.

The Marine Corps considered requiring that no one provider could win both contracts. But its concerns that such an approach could preclude contract award to the best-value offeror under both regional contracts (if the same offeror submitted the best-value offer on both coasts) and force award of one contract to the second best offeror led it to decide against doing so.

The Marine Corps wanted a performance-based statement of work. In interactions with the Marine Corps, Sodexo probed to understand exactly what that meant. Sodexo explored the Marine Corps's views on important technical issues and on how the evaluation process would proceed. As the source selection continued,

Sodexho became increasingly convinced that it could propose something fundamentally new. The solution it developed allowed it to drop its price about 20 percent from the level for its initial approach, giving it a critical advantage in a competition that weighted price heavily. Unfortunately, the changes were so large that they raised questions about the realism of Sodexho's proposed price.

The Marine Corps received four offers in each competition. Sodexho was one of two offerors in the competitive range in the east and one of three in the west. Sodexho offered the low price in both competitions and got an excellent rating on organization and management. The Marine Corps awarded both competitions to Sodexho on 14 March 2001.

Subsequently, the General Accounting Office (GAO) received a number of protests concerning the award of the contract. In July 2001, GAO dismissed one of the complaints but upheld another, and advised the Marine Corps to ask all parties that had tendered to the original competition to submit new offers. The Marine Corps conducted discussions with all offerors and reevaluated the proposals prior to making this award.¹⁵

The protests were unusual in terms of the issues they raised, how GAO managed them, and how long they took to resolve. They raised questions about whether a foreign offeror's proposal should be given closer scrutiny than a domestic offeror's, and about the evaluation of price and past performance, which did not appear to be material to the outcome. GAO accepted one protest from a firm that had withdrawn its proposal; another protest came from a firm whose proposal was so inferior on organization and management grounds that it could not have won the competition.

It took 16 months to resolve the protests; Sodexho was awarded the two contracts in July 2002. New ideas can draw legal challenges, challenges that discourage innovation but are nonetheless an inevitable part of the process of change. We did not assess how much value these protests and GAO's treatment of them added to the DoD proc-

¹⁵ Frequently Asked Questions at <http://www.sodexhoUSA.com> (updated as of 24 May 2002).

ess of acquiring services. They do, however, deserve further attention if the right lessons learned are to be drawn from them. For now, suffice it to say that a 16-month delay is likely to be unacceptable to the typical nontraditional services provider DoD is trying to attract. The Marine Corps is fortunate that Sodexho was willing to invest one million dollars to get through these difficulties to enter the federal market.¹⁶ And the Marine Corps may have spent even more in its efforts to complete this source selection.

Contract Type and Terms

The two contracts awarded are fixed-price-incentive (FPI), multi-year service contracts.¹⁷ Fixed target prices for each of the eight years in the contract assume about 14 million meals a year for each region. The share ratio is 50:50, meaning that Sodexho and the Marine Corps share any cost savings or cost overruns in the relevant region of the target.

The Marine Corps effectively pays Sodexho per meal served and shares any cost savings achieved 50:50. Even if Sodexho can achieve only small reductions in cost while maintaining quality high enough to sustain demand, the heavy volume of production means that the cost reductions can accumulate quickly. Higher sales translate into smaller per-unit production costs and higher profit margins for Sodexho. Sodexho thus has an incentive to provide as many meals as possible within the parameters set by the contract. Because in the past almost 50 percent of Marines with meal cards did not use those cards on any particular day, Sodexho has a large opportunity to expand demand and benefit from doing so. And under the FPI terms of the contract, when Sodexho benefits, the Marine Corps benefits as well.

¹⁶ Frequently Asked Questions at <http://www.sodexhoUSA.com> (updated as of 24 May 2002). Sodexho also notes that, as burdensome as the federal procurement process is, the federal government also treats the offerors that win far more fairly and predictably than the average commercial buyer does.

¹⁷ The East Coast contract is M00027-02-C-0001, the West Coast is M00027-02-C-0002 ("Contracts: Navy," 2002).

In earlier food service contracts, the Marine Corps set standards that required a mess hall food line to handle, say, eight Marines a minute at peak and to staff the line so that this performance occurred on every line, at any time. The current contracts encourage Sodexho to increase total demand while consolidating lines to get costs down. Everyone benefits in the end by this shift in emphasis toward performance.

Sodexho also predicts a somewhat more subtle effect of the performance approach in the contract. If a Marine had walked into any mess hall in CONUS two weeks before Sodexho took over, he/she would have found an orderly, spotless kitchen, the food having been prepared in advance and held ready under warmers. Today, Sodexho's mess hall operations at meal time are more likely to look like those in a commercial kitchen—that is, like a kind of organized chaos. A kitchen cannot produce the best quality food if it prepares the food two hours in advance, so such craziness can be expected to accompany improved quality of service. In other words, the proof of performance is in the food itself, not in a spotless mess hall kitchen.

The contracts use no award fees or award terms. Award terms were not well understood when these contracts were in development, and the Marine Corps felt it did not need an award fee to sharpen the incentives that already existed at the heart of the program.

Although the Marine Corps structured this program explicitly to encourage investment in appropriate technology, it did not indemnify such investment explicitly. The Marine Corps is liable for cancellation costs associated with some of Sodexho's up-front costs if the Marine Corps cancels the contract prematurely, but these costs do not cover Sodexho's investment in its new western cook/chill plant. In general, Sodexho is concerned more about the risks it bears because it cannot cancel than about the risks it bears if the government cancels.

The five-year base period presumably stabilizes Sodexho's economics of investment. The OMB did not require the Marine Corps to "score" the entire cost of service during this base period. Rather, it

scored only the cancellation cost that the government would incur if a future Congress decided not to fund the contract.¹⁸

The Marine Corps retained responsibility for maintenance of government assets in the first year. During that year, Sodexho inventoried equipment to be maintained and prepared to take over maintenance responsibilities in the future when it better understood those responsibilities. Sodexho will also advise the Marine Corps on new investments, equipment retirements, and a preventive maintenance plan. The Marine Corps will remain responsible for buying durable assets relevant to the contracts. Sodexho has already included the cost of such maintenance responsibilities in the prices that it offered in its proposal. Sodexho is free to invest in equipment to advance its own interests by, for example, reducing its future operating costs.

Execution

Giving Sodexho responsibility for paying for its own subsistence was an integral part of the program to create effective performance-based incentives in the program. The Marine Corps traditionally used two different kinds of funds to pay for food service: One paid for the subsistence, which the Marine Corps acquired directly through DLA prime vendor contracts, and the other paid for food services, typically through contracts with small firms. Without unification of the Marine Corps's subsistence and labor accounts, the current program could not have created the incentives sought. To allow Sodexho to purchase directly from DLA and integrate financial management of the Sodexho contracts within the Marine Corps, the Marine Corps unified the subsistence and labor accounts relevant to the Sodexho contracts in its Military Personnel, Marine Corps account.

Best commercial practice typically allows a food service provider to purchase its own ingredients, a function that is normally a core

¹⁸ Scoring defines what portion of a new contract a buyer must count against its current obligation authority. If a contract commits the government to expenditures over several years, those expenditures must be authorized when the contract is approved. In effect, the Marine Corps food service contracts commit the government only to pay cancellation costs if it decides to discontinue the contract in the future.

competency of such firms. The Marine Corps requires that purchases be made through DLA to help sustain DLA's critical mass, especially in anticipation of demands during contingencies, and to mitigate broader political concerns within DoD. In its broader food service business, Sodexho uses many of the same prime vendors that DLA does. But its relationships with them when buying for a commercial or education customer differ from those that DLA provides. Sodexho simply uses the arrangements provided by DLA here.

Sodexho hired 100 managers and over 2,000 employees to staff the Marine Corps food service contracts within 90 days of start-up. Sodexho has 100,000 employees in the United States and has deep experience in managing quick changes in employment levels at specific locations.

Sodexho will rely on this experience to support the Marine Corps requirement calling for Sodexho to carry on, without degrading performance in the mess halls, in the event that the Marines must be withdrawn from the mess halls for deployment without warning. The Marine Corps is leaving Marines in 18 mess halls for training and to maintain its rotation base in CONUS for military positions overseas. To maintain appropriate reporting chains, these Marines report to a senior enlisted person who coordinates their activities with the Sodexho team leaders on site. Sodexho sees these Marines as integral members of its team at each location and intends to use these reporting chains to integrate them into a "joint" organization that is as seamless as possible. If the Marine Corps must deploy these Marines, Sodexho intends to rely on its large employment base and experience modulating employment fluctuations to fill any holes quickly. The contracts allow for equitable adjustment if necessary but do not provide details. Sodexho does not anticipate any need for adjustment.

The Marine Corps gives Sodexho a master menu on a 28-day cycle and associated armed forces recipes. Sodexho adjusts these recipes, with Marine Corps concurrence, to fit the needs of its cook/chill system. This is a common commercial practice.

This approach to buying food service in effect relieves the Marine Corps of the need to monitor the quality of the food itself. Sodexho benefits by serving high-quality meals that encourage

Marines to come to the mess hall, so the Marine Corps's quality assurance plan can confidently delegate all responsibility for food quality to Sodexho. This allows the Marine Corps to focus its quality assurance efforts on elements of performance not as directly incentivized by the basic contract type. For example, the Marine Corps sets standards for things such as the time Sodexho takes to clean up a food spill in the mess hall.

Sodexho works with the Gallup Organization to field sophisticated "category management" questionnaires that track customer tastes and satisfaction with food quality and other attributes of mess hall service. Sodexho has learned, in its university market, how to use category management to increase cafeteria utilization. Sodexho integrates information from its other sites to place results at any one site in context and to look for ways to improve food service at the site. In effect, quality control at any Marine Corps location occurs in a much broader corporate setting and benefits from synergies across Marine and non-Marine sites. Ongoing benchmarking is built into the Marine Corps's relationship with Sodexho.

Sodexho's surveys support not only quality control, but also market research: They help Sodexho determine what kind of food to serve in mess halls. The menu prescribed by the Marine Corps is a minimum requirement; as long as Sodexho makes it available in mess halls, Sodexho is free to offer other foods that its market research indicates satisfy Marines. Such market research is an integral part of Sodexho's broader approach to food service. The structure of this contract gives the Marine Corps automatic access to the benefits of this research.

Follow-on

There are no formal efforts to expand or extend the coverage of the two contracts, but the program itself creates the basis for potential expansion through other contractual vehicles. As noted above, Sodexho already provides food service to DoD in CONUS. Last year, it won additional work, through an OMB A-76 study, in the Navy's

Pensacola Regional Complex in Florida.¹⁹ The Marine Corps program demonstrates a new paradigm that Sodexo and others can pursue at other DoD locations.

¹⁹ GAO, 2002.

Groundbreaker Program¹

Services Involved and Key Players

The Groundbreaker program is a partnership between the National Security Agency (NSA) and industry to modernize and sustain NSA's non-core information technology (IT) infrastructure in its headquarters at Ft. Meade, MD.² Services to be provided include³

- Modernized infrastructure and business process redesign
- Continuous technology refreshment
- Increased access to market IT talent pool
- Network design, security, and support for approximately 40,000 employees
- Desktop and/or telephony support for approximately 40,000 employees
- 22 terabytes of data storage capacity (approximate size of Library of Congress)

The contract incorporates phases under which targeted improvements and shifts in resources are to be accomplished, first to bring "poverty technology areas" up to the state of the art, and subse-

¹ This appendix benefited from related RAND research on the management of acquisition at NSA by Leslie Lewis, Roger Brown, and others (see Lewis et al., 2002).

² King, 2001; Eagle Alliance, 2001.

³ King, 2001. Also see "Spy Agency Eyes Bids for \$5 Billion Technology Overhaul," 2000.

quently to maintain IT support at such high levels. Only the most mission-critical supercomputing and decryption/encryption services are exempt from the Groundbreaker vehicle. While there is a potential for the Groundbreaker program to expand to include NSA IT support worldwide, NSA has stated that such an expansion would lead to a recompetition.⁴

The Eagle Alliance, a joint venture of Computer Sciences Corporation (CSC) and Logicon, a division of Northrop Grumman, provides these services.⁵

Key Dates and Dollar Size

Performance began on 1 November 2001⁶ and will continue for 10 years if NSA exercises a three-year option. NSA has estimated the total value of the program at approximately \$2 billion.⁷

High-Level Policy Goals That Motivated the Creation of the Program

NSA's primary mission is collecting, decrypting, and analyzing signals intelligence (SIGINT); Groundbreaker is designed to help NSA fulfill its mission in two specific ways: (1) equipping NSA with state-of-the-art internal data network and storage systems to perform its non-core missions;⁸ and (2) using outsourcing in non-core areas, while pro-

⁴ Seffers, 2001c.

⁵ Eagle Alliance, 2001; "NSA's Groundbreaker Awarded," 2001.

⁶ NSA, 2001.

⁷ Wait, 2001.

⁸ Seffers, 2001b.

viding “soft-landings” for outsourced employees, to help NSA focus its continuing in-house efforts on improving its core missions.⁹

Before Groundbreaker, the rigid compartmentalization that had existed in NSA since its founding led to highly complicated and increasingly ineffective IT support segregation. This is best exemplified in NSA’s developing 68 independent e-mail systems. Unnecessarily complicated IT system design and support made oversight and efficiency, as well as resource planning, very difficult.¹⁰ These constraints allowed commercial industry to develop much better IT infrastructures than NSA had in its non-core areas.¹¹ Improved efficiency and cost savings were expected to also accompany consolidation of multiple existing IT networks.¹² Outsourcing would make improvements in the quality of service, technology, cost, flexibility, etc., more easily available to the ultimate customer at NSA.

Groundbreaker was part of a broader program to improve the internal management of NSA, a high-security agency whose inner workings had always been hard to oversee from the outside. The director of NSA, Lt. Gen. Michael Hayden, saw Groundbreaker as an integral part of his broader program to improve the management of the agency as a whole,¹³ and as an essential part of his effort to let NSA focus on its own core missions. By outsourcing IT service, NSA hoped to better focus resources on primary mission activities while improving technology support, efficiency, and accountability.¹⁴

⁹ “NSA to pursue government-industry partnership for information technology infrastructure services,” NSA, 2000.

¹⁰ King, 2001.

¹¹ Verton, 2001.

¹² “Spy Agency Eyes Bids for \$5 Billion Technology Overhaul,” 2000.

¹³ Verton, 2001.

¹⁴ Verton, 2000.

Socioeconomic Goals

NSA realized that in meeting its contractual goals, it would have to outsource or transfer a number of employees; this gave rise to the socioeconomic goal of ensuring stable transitions and “soft landings” for outsourced employees. The soft landing provisions were thus designed to ease the transfer of security-cleared personnel into the private market, where they in many cases continued their IT work for NSA under a new status as contractor rather than government employees.¹⁵

The business case analysis anticipated effects on 1,000 civilian NSA employees. The compensation package designed to help NSA employees transition to employment in the Eagle Alliance included the promise of matching or bettering each applicable government employee’s salary, with an additional signing bonus of up to \$75,000 for switching to company employment, access to other company performance bonuses, a five-year guarantee of employment, and full benefits.

Of the 1,000 civilians whose jobs were subject to outsourcing, NSA chose to provide incentives to move 750 to the contractor; 638 accepted and were transitioned in two waves by simply changing their affiliation from government to company payroll and identification. The Eagle Alliance gave the first wave of employee transfers sign-on bonuses of up to \$75,000 and offered the second wave of employees targeted for transition up to \$60,000 sign-on bonuses as reserve, nonpermanent employees of Eagle Alliance.

The Groundbreaker contract incorporates a requirement that 25 percent of subcontracting be directed to small and disadvantaged businesses.¹⁶ The presence of a consortium of small firms and businesses on the Eagle Alliance team helps the program meet this goal.

¹⁵Peckenpugh, 2001b.

¹⁶ “SES Wins Share of NSA’s \$2 Billion Groundbreaker Project; Baltimore Business Expects to Double Revenue, Hire 100 Workers,” 2001.

Other General Information

The Director of NSA gave the NSA Senior Acquisition Executive great authority and discretion to construct the Groundbreaker program. NSA involved the Assistant Secretary of Defense (Command, Control, Communications, and Intelligence) and the Director of Central Intelligence early in the acquisition process; in exchange for this, NSA was granted milestone authority to drive the process. NSA pushed information on Groundbreaker on a regular basis. This helped build confidence in OSD, which had less staff than necessary to provide close, proactive oversight.

Flexibility helped NSA navigate what was a very complex process of discovering its baselines and requirements for mission support. The focus was especially placed on creating an oversight process that would not hinder the speed of contract formation. The NSA Act of 1952 and Executive Order 12333 gave NSA access to various national security exemptions to contracting requirements that would have speeded the process further; however, NSA chose to use this authority on only three occasions in order to maintain credibility in the contract formation and oversight process.

Key Steps in Acquisition

Beginnings

In the years leading up to Groundbreaker, government reliance on private providers of IT and information services was becoming increasing common. NSA itself had already begun two successful IT-related contracts. In a 1998, \$20 million program called Breakthrough, NSA outsourced various software and program management duties to DPC Technologies, a company later acquired by Logicon, which in turn became part of the Eagle Alliance.¹⁷ Breakthrough

¹⁷ "CSC Awarded Multimillion Dollar Outsourcing Contract by NSA; Breakthrough Contract Involves Transition of Federal Employees to Industry," 1998.

successfully tested methods for transferring displaced NSA employees to a contractor in a mutually satisfactory way. In the 2001 Trailblazer program, NSA outsourced to Litton Industries \$57 million worth of activities to modernize foreign SIGINT collection, processing, and analysis.¹⁸ Both of these programs and concurrent attempts by other major government organizations to consolidate and modernize IT services by outsourcing led to increased interest in a widespread IT initiative at NSA. A San Diego County IT outsourcing program was a valuable benchmark, because it dealt with a similarly structured contract being made for one of the largest local governments in the country.¹⁹ Also similar, but more controversial, was the Navy Marine Corps Intranet (NMCI) program, which was instructive in forewarning Groundbreaker designers about potential problem areas during contract construction.²⁰

As a first major step in preparing for Groundbreaker, NSA, with the support of Booz Allen Hamilton and PEC Solutions, embarked on a 15-month feasibility study to examine the potential risks and benefits of outsourcing IT support. Focusing on an analysis of earlier, similar programs, such as Breakthrough, this study made various determinations useful in Groundbreaker's design.²¹ Of particular importance was the conclusion that outsourcing was preferable to the alternative of privatizing IT support outright, which would have required a transfer of assets from government hands and forced NSA to relinquish responsibility and control to an unacceptable extent. The feasibility study had three elements: (1) construct a baseline inventory of non-mission area IT requirements and program descriptions, (2) perform an economic analysis of business cases, and (3) conduct a planning process on how to design the acquisition and management of IT programs and personnel shifts.

¹⁸ Seffers, 2001a.

¹⁹ CSC is involved in this.

²⁰ CSC lost this to Electronic Data Systems Corporation.

²¹ Verton, 2000.

Initially, NSA considered using Groundbreaker to cover six areas of IT support. To limit the exposure of mission-critical activities to outsourced services and shrink the size of the program, NSA pared Groundbreaker down to the four areas eventually chosen: distributed computing, networks, telephony, and enterprise management. When senior Pentagon officials asked whether NSA could safely outsource internal networking and telephony, NSA built requirements that any contractor would use highly cleared personnel under strict monitoring to ensure compliance with security procedures.²² Groundbreaker ultimately did not outsource support applications and data center services. Groundbreaker was limited to the Ft. Meade facility and surrounding area and did not include many field activities that effectively occur in an environment different from that at the Ft. Meade facility. The data centers contain the crown jewels of the NSA, the supercomputers tasked with highly classified data storage, encryption, and decryption.

Analysis indicated that a Groundbreaker program structured around the activities identified above would affect about 1,000 government civilians, 700 contract personnel, and 150 military personnel.²³ This raised three issues. First, the government civilians had clearances and skills relevant to NSA and were worth keeping associated with the program. NSA set a goal to have the Groundbreaker contractor attract and retain 750 of them (we discuss how that was done below). Second, most outsourcings that displace this many civilians must be managed through the Office of Management and Budget's (OMB's) Circular A-76 cost comparison process (we discuss how NSA approached this challenge below).²⁴ Third, the 150 military personnel affected could be transferred elsewhere. The Groundbreaker provider would have to replace the skills they embodied and take on responsibility for integrating remaining pre-Groundbreaker contractor personnel with Groundbreaker contract activities. Such

²² Verton, 2000.

²³ Eagle Alliance, 2001.

²⁴ OMB, 1999.

integration would have to become an integral part of the Groundbreaker mission.

Outsourcing Issues

Deciding how to deal with Circular A-76 was the most difficult part of the acquisition. An A-76 cost comparison is a costly, slow, awkward public-private competition ill suited to address NSA's strategic goals for Groundbreaker because it focuses so much on reducing cost relative to other goals. The thorough integration of organic and contract personnel in the activities that Groundbreaker covered would also be problematic in A-76, because A-76 has no formal provisions for allowing the organic "offer" to include pre-selected contractors in what is effectively a partnership arrangement. A national security waiver was available, but that would not have been consistent with the new effort at NSA to impose more-disciplined management. A cost-comparison waiver is potentially available under A-76 if conversion to private-sector performance is expected to result in significant financial or service quality improvement. NSA chose instead to seek a new requirements exemption to the cost comparison process based on the significant business process re-engineering anticipated under Groundbreaker.²⁵ By coupling this interpretation of A-76 with the argument that consolidating existing networks and IT restructuring in effect created a "new service" package, NSA was able to win OSD approval for a certification that A-76 requirements were satisfied without the formal cost comparison. Because NSA has no union representation, NSA may have had an easier time achieving this outcome than would other agencies with similar interests in outsourcing.²⁶

²⁵ Eagle Alliance, 2001.

²⁶ Peckenpough, 2001b.

Source Selection

NSA built a business case to initially plan requirements for constructing the request for proposals (RFP). This case included benchmark metrics provided by a Gartner Group study (used to supplement the feasibility study) to measure the due diligence performance of vendors, the nature and requirements of existing IT contracts, the requirements of financial operations, and service area modernization goals.

NSA invited a set of leading firms, which it deemed technologically and financially capable of providing the services it expected under Groundbreaker, to participate in the source selection. NSA favored firms with general, large-scale service contract experience, large-scale IT outsourcing experience, and experience with NSA. CSC, AT&T, OAO (now part of Lockheed Martin Information Support Services), Andersen Consulting, EDS, GTE, IBM, Keane Inc., and Lockheed Martin were among the firms included.²⁷ Three pre-qualified teams formed: the Eagle Alliance that won; an OAO team that included EDS, Getronics, Coleman Research, ManTech International, and Global Crossing; and an AT&T team that included IBM, Lockheed Martin, and SAIC.²⁸

In January 1999, NSA initiated an 18-month process in which these firms studied, questioned, and commented on NSA's requirements before actual source selection.²⁹ Over 1,200 industry questions led to several RFP drafts over this 18-month period. This process also resulted in a detailed database of NSA work, revealed that many aspects of the Groundbreaker program would entail consolidating existing contracts "in a new way," and revealed that many of the IT professionals in NSA's numerous support offices were contracting and program management people, already overseeing IT support services provided by contractors.

²⁷ Wakeman, 1999.

²⁸ Seffers, 2001c.

²⁹ Wakeman, 1999.

Operating under the Gartner Group models discussed, NSA invited the teams to comment on early versions of the RFPs. Competitors generally sought to pare down the lengthy list of government metrics, instead adopting the more flexible performance-based standards favored by commercial practices.³⁰ In particular, companies sought to reduce the contractual reliance on military specifications (MILSPECS) and the emphasis on processes required rather than on individual task requirements.

Team offers were due in May 2001.³¹

Because NSA pre-qualified companies to offer based upon their ability to handle the technological requirements of a winning offer, the actual source selection criteria did not greatly weight past performance. Rather, NSA used the following three criteria: (1) demonstration of management and technical approach (45 percent weight), (2) human resources transition plans (25 percent weight), and (3) price offered (30 percent weight). NSA, drawing on Gartner Group models from its acquisition planning, estimated that the baseline cost of retaining the *status quo* for IT services over 10 years would be approximately \$3.5 billion. The three final prices offered clustered around \$2 billion.

Although past performance was not a major factor in deciding the contract winner, CSC did have extensive experience in meeting the sorts of requirements that would be expected of the eventual Groundbreaker contract winner. In February 1999, CSC's INFOSEC unit was the first worldwide business to attain independent level-three security certification from NSA, for its ability to measure and perform information security assessment functions. At the time of the certification, NSA announced that this ability was key to demonstrating superior information security capabilities for government (and commercial) clients.³² CSC had also demonstrated success

³⁰ GAO, 2001.

³¹ Seffers, 2001a.

³² "CSC INFOSEC Unit Achieves Coveted Systems Security Engineering Capability Maturity Model Rating," 1999.

in the Breakthrough outsourcing program that in some ways was the antecedent of Groundbreaker.³³ CSC's ability to demonstrate capability in these areas may have played a role in the analysis of its capacity to satisfy Groundbreaker's requirements under the three criteria actually used to review the offers.

Through analysis of the three criteria, the Eagle Alliance became the favored contender; on 31 July 2001, it was announced the contract winner.³⁴ NSA felt that it captured NSA's needs more effectively than the other teams and communicated its planned approach better.

Contract Type and Terms

The contract uses a seven-year base period to give the contractor time to make the investment decisions required to refurbish NSA's non-core IT infrastructure, and a three-year option. It also uses a price fixed in part via benchmarking and an award fee.³⁵

The focus of the contract is on outsourcing the entire management of IT design, construction, and maintenance to contractors and subcontractors that provide materials consistent with end goals.³⁶ Under Groundbreaker, suppliers go directly to the Eagle Alliance to work as subcontractors and vendors, rather than dealing with NSA staff piecemeal.

Groundbreaker is aggressive, using performance-based service-level agreements (SLAs) incorporated directly into the contract language rather than specifying means to reach objectives.³⁷ As such, technical ends are noted, but the contractor has discretion on how it will meet goals, under NSA supervision.³⁸ One exists for each of the four areas that Groundbreaker covers. They identify specific service

³³ "CSC Awarded Multimillion Dollar Outsourcing Contract by NSA; Breakthrough Contract Involves Transition of Federal Employees to Industry," 1998.

³⁴ NSA, 2001.

³⁵ Eagle Alliance, 2001.

³⁶ Seffers, 2001b.

³⁷ Wakeman, 1999.

³⁸ Wakeman, 1999.

metrics (e.g., availability; installation, move, add, change; incident resolution; technology refreshment) that measure the level of service for specific IT systems (e.g., desktops, peripherals, laptops).³⁹

The contract includes benchmarks for performance and a specified schedule to ensure adequate performance and quality assurance. Additionally, vendor competition is monitored by a requirement that vendors stay in the bottom 25 percent of market service provider costs or else have their costs automatically adjusted by contract mechanisms. This price performance benchmarking prevents vendors from underbidding to win a contract and then later claiming additional funds are needed to deal with overruns. Appeals are not available for these price reviews and determinations, which helps avoid low performance by vendors.

This is a radical, new approach in a federal setting, but well tested and accepted in a commercial setting. The primary difference between the Groundbreaker arrangements and commercial arrangements reflects NSA's unique environment and high-security concerns. As part of the source selection, each offeror provided a factor that would be used to compare its cost with commercial benchmarks. This factor is designed to reflect the offeror's assessment of how much more challenging the NSA operating environment is than that of a benchmark organization.

NSA used the FAR 15 process to ensure that contract costs and monitoring provisions would be acceptably written. FAR 15 was seen as particularly useful because it provides ready visibility of contract costs, easing quick renegotiations, and it allows contractors to be proactive in changing work scopes to meet evolving requirements. FAR 15 was also determined to have a more realistic pricing structure than alternative mechanisms do.

This use of FAR 15 stands in contrast to what was done on a similarly sized and structured IT outsourcing effort, the NMCI program. That program opted to use FAR 12, in which "commercial-

³⁹ Eagle Alliance, 2001.

style” rules for cost visibility are not specified ahead of time, and which has led to controversy implementing the program. For example, if a contractor specifies that it can support 1,200 computers with a help desk of four people, NSA can use FAR 15 to judge the adequacy of that level of responsiveness more easily than if FAR 12 were being used to judge costs relative to performance.

For each contractual SLA, contractors monitor themselves for performance according to metrics specified by the contractual agreement. NSA independently audits the contractors’ performance to ensure compliance with stated timetables. The contract schedule provides for full modernization of NSA IT in 30 months from date of implementation (six months faster than called for in the initial RFP), with modernization of “poverty areas” within eight months. The continuation of benchmarking after this allows NSA to monitor costs relative to Eagle Alliance peers for a fixed level of performance. The expected “refresh rate” for updates is three years for desktop computers.

NSA has stated that while it is open to the possibility of expanding the Groundbreaker program to cover support for previously uncovered areas (including worldwide IT support), any contract alterations that significantly expand the parameters of the agreement would likely trigger a new round of competition.⁴⁰ CSC estimates that IT support work such as that covered by Groundbreaker, but outside the NSA headquarters, could be worth an additional \$3 billion over 10 years.⁴¹

Risk management was incorporated into the contract by way of standard commercial benchmarking and award-fee procedures. Contract language allows the Eagle Alliance to ramp down over two years if it fails to perform, with the expectation that NSA would use this period to replace the source. The methods and technologies employed in Groundbreaker are now so mature in the commercial sector that NSA is confident that an alternative source could be identified

⁴⁰ Seffers, 2001c; Dizard, 2003.

⁴¹ Wait, 2001.

quickly if the Eagle Alliance failed. But security requirements would complicate any effort to do this. None of the firms invited to participate in this source selection presented security problems.

Both competence and security were concerns addressed more in the pre-competition and source selection processes than in early contractual formation.

Execution

This contract represents a large but logical expansion of prior NSA efforts to experiment with outsourcing IT.⁴² The Eagle Alliance began recruiting personnel on 8 August 2001; transitioning employees shifted smoothly from NSA to Eagle Alliance employment on 1 November 2001.

Under Groundbreaker, the previously fragmented NSA acquisition process is centralized, with all acquisition managers instructed to deny any requests for IT services that do not use Groundbreaker mechanisms. Strong top-down support for (and from) the NSA Director and the Senior Acquisition Executive office enabled this degree of centralization to take root.

Interestingly, the Eagle Alliance did not fully understand the structure of NSA IT employment until contract award. For example, when starting the staffing and recruitment stage of contract implementation, Eagle Alliance managers were surprised to find a relative dearth of GS 11/12 level NSA IT technicians, in contrast to a glut in GS 14/15 level managers and supervisors. The Eagle Alliance was similarly surprised at the amount of staff devoted to supervising contract efforts. A performance-based contract (favored by industry) requires fewer such supervisors than does the process-based vehicles favored by government. This is because the former requires only that results be monitored according to timetable, while the latter requires more-extensive process monitoring.

Fallout from 9/11 forced NSA to delay full implementation of the performance-based approach, thus making a major adjustment to

⁴² Verton, 2000.

the contract. That said, performance has generally proceeded according to schedule.

F/A-18-E/F Integrated Readiness Support Team Program

Services Involved and Key Players

Under the F/A-18-E/F Integrated Readiness Support Team (FIRST) program, Boeing has authority to manage a total logistics support program for 850 components unique to the new Navy F/A-18-E/F Super Hornets entering the fleet. This responsibility includes meeting system demand requirements of operational sites, intermediate sites, and depot sites, as well as repairing or replacing all parts covered by the FIRST contract, using Navy, Boeing, and subcontractor sources to perform specific elements of the support services involved.¹ The FIRST program delineates closely defined roles for the Navy and Boeing.² For example:

- Boeing and the Navy operate as a single management team for the FIRST program. Personnel from Boeing and the Navy staff a hierarchical set of integrated process teams (IPTs) relevant to a wide range of Super Hornet support activities.
- The Navy gives Boeing planning data on its future operations.
- The Navy provides organizational and intermediate maintenance.

¹ F/A-18-E/F Integrated Readiness Support Teaming (FIRST) Contract, N00383-01-D-001H, 2001, Sec. C-1.

² Fiore, 2000; "Boeing Awarded \$251.9 Million Contract for Super Hornet Support," 2001.

- Boeing partners with the Naval aviation depots (NADEPs) for depot-level maintenance.
- Boeing has authority to make specified engineering changes, with Navy concurrence.
- The Navy retains responsibility for engineering changes that affect safety or operational capability.
- Subject to these conditions, Boeing designs and executes a support program for the parts in the program.
- The Navy monitors realized allowable costs to implement cost-related portions of the contract.
- The Navy monitors standard logistics metrics to measure performance of the whole program.
- The Navy sets inventory levels at the retail level, on shore, and on carriers. Boeing fills the remainder of the pipeline.
- Numerous detailed rules and arrangements draw a bright line between the roles, responsibilities, and liabilities of the Navy and Boeing. Detailed processes explain how the Navy and Boeing will work together to make decisions.

The Director of Logistics for the F/A-18 program in Naval Air Systems Command (NAVAIR) designed and implemented the FIRST program. The Naval Inventory Control Point (NAVICP), Philadelphia, and NAVAIR are contracting activities for the FIRST contract. Boeing subsidiary McDonnell Douglas is the prime provider of services for FIRST.

Key Dates and Dollar Size

The FIRST contract was awarded in May 2001 as a five-year contract expected to be worth \$770 million if all options are exercised.³ The first two years were worth \$251.9 million. This is a supplementary contract, designed to reduce operating and support costs, associated

³ Boeing Press Office, 2001.

with the FY 2000 Navy multi-year award to Boeing of an \$8.96 billion contract for production of 222 Super Hornets over five years.⁴ The FIRST program is an integral part of the Navy's broader program to introduce the Super Hornet into the fleet.

High-Level Policy Goals That Motivated the Creation of the Program

Navy leadership expected that an innovative support contract for the Super Hornet, designed to exploit best commercial practices, could reduce the life cycle, total ownership costs to the Navy for the new Super Hornet fleet. The Navy expected operating and support costs to account for upwards of 70 percent of its total ownership costs.⁵ Aircraft operating and support costs have generally risen over 8 percent per year in recent years; this led the Navy to emphasize potential operating cost savings in its purchase of new Super Hornets.⁶ While it appears that most of the long-term cost savings expected from the Super Hornet program will flow from the aircraft's design and parts requirements, the FIRST program gained high-level support because it could further reduce those costs.

The FIRST contract states that the Navy and Boeing will work together to reduce costs primarily through continuous logistics process improvement and improvements in reliability and maintainability (R&M).⁷ FIRST seeks to "generate a significant operating and support cost avoidance through supply chain management, proactive in-service engineering, reliability improvement, integrated information systems, and use of an integrated network of suppliers."⁸ As Boeing

⁴ "F/A-18-E/F Super Hornet Strike Fighter Fact Sheet," 2001.

⁵ From Boeing Military Aerospace Support Web Page (<http://www.boeing.com/defense-space/military/as.htm>) 20 October 2001.

⁶ Keeter, 2001.

⁷ FIRST Contract, Sec. C-1.

⁸ Cormier, 2000.

and the Navy negotiated the target levels of performance for specific metrics in the program, they sought not only to reduce cost, but also to improve logistics performance factors such as cycle times, maintenance man-hours required, or mean time between failures. These can reduce total ownership costs by reducing inventory and labor requirements. But at least as important, they can make the support system more robust in the face of unexpected surprises during a contingency and reduce requirements for forward-deployed support. The target metrics chosen indicate that such performance improvements are also important to the Navy.

Socioeconomic Goals

The main socioeconomic issue to arise in this acquisition was the status of NADEPs with skills and capacity available to support parts used on the Super Hornets when they are fielded. During the 1990s, Congress and DoD worked through a variety of arrangements to protect government civilians employed by DoD depots. The base realignment and closure (BRAC) process provides a less political and more objective process than is allowed by the traditional rules Congress used to decide which depots should close or restructure as DoD fell in size following the end of the Cold War.⁹ A congressional restriction on the maximum portion of DoD depot workload that comes from contract sources has limited DoD's ability to outsource depot workload that remained following DoD's downsizing.¹⁰ Most recently, a set of congressional arrangements allowing public-private partnerships created opportunities to use organic depot capacity to produce output controlled by contractors. FIRST provided an opportunity to use this last form of arrangement.¹¹

⁹ For more information, see Hix, 2001.

¹⁰ United States Code, Title 10, Sec. 2466.

¹¹ The partnerships in FIRST occur under the ground rules provided in U.S.C. Sec. 2474 (FIRST Contract, Sec. H-13). For information on the broader DoD partnership program, see Hunter, n.d.

This broad socioeconomic interest in protecting government civilians in depots helps explain the source selection decision made under the FIRST program on provision of depot-level maintenance services (more details below).

Key Steps in Acquisition

Beginnings

An OSD emphasis on using best commercial practice to improve customer support, dating from 1996, led then Assistant Secretary of the Navy for Research, Development, and Acquisition, John Douglas, to challenge the Super Hornet program. The Navy tasked Boeing to review alternatives. This led to a two-week meeting at San Diego, where the first elements of the FIRST program came together. FIRST emerged from a series of studies looking at alternatives to provide optimum support for the F/A-18-E/F.

Based on these studies, Todd C. Mellon, Director of Logistics for the F-18, created a team in 1998 to develop a Navy/Boeing teaming approach. It sought to put Boeing "in the position of making the best long term decisions for the lowest total cost of the platform."¹² One hundred people met to develop a program concept and baseline; meetings followed to develop a business plan and to refine the framework, delineate roles and responsibilities, and create detailed process maps. The FIRST teaming approach included an integrated set of IPTs responsible for different parts of the development. The central team continually challenged these IPTs to be more aggressive, moving wherever possible to give Boeing as much authority, responsibility, and accountability as possible, subject to a constraint that depot maintenance work would remain organic. This ultimately and logically led to holding Boeing accountable for achieving the Navy's basic logistics goals, as defined by its standard metrics. This path was not easy or obvious from the beginning.

¹² Mellon, as quoted in Cormier, 2000.

Through 1999, Boeing and the Navy conducted a series of studies on alternatives for logistics support to develop cost savings in the Super Hornet program.¹³ For inspiration, the developers of the FIRST program reviewed other recent attempts in DoD to reduce long-term operations and support costs. The programs reviewed included the C-17 Boeing Contractor Logistics Support (CLS) contract, the Joint Strike Fighter autonomic logistics concept, and various engine support contracts.¹⁴

Boeing and the Navy also learned from experience closer to home. They found that the use of integrated test teams (ITTs) during the engineering and manufacturing development phase of the Super Hornet development simplified and accelerated that program's testing and approval process.¹⁵ Bringing this lesson into the FIRST program improved the development process for the program and also promised to improve its implementation by improving communication and coordination between Boeing and the Navy. Effective integration would be critical to operational support of the Super Hornet and achieving the aggressive goals set for the FIRST program.

Boeing/Navy teams started with high-level metrics and worked down. They initially examined metrics such as mission capability rate, aircraft availability, and sorties generated. Two problems ultimately convinced the teams that such high-level metrics were inappropriate, by themselves, for defining and monitoring progress toward goals in the FIRST program. First, FIRST covered only components unique to the Super Hornet. Boeing could not affect the nonunique parts and so could not assume total system support responsibility for the Super Hornet fleet, with related fleet-level metrics. Second, even if Boeing controlled all parts, the links between parts availability and fleet-level performance were not well enough understood to hold Boeing accountable for fleet-level performance metrics when it could

¹³ Cormier, 2000.

¹⁴ For more information, see Okumura, 2000; Joint Strike Fighter System Program Office, n.d.

¹⁵ Cormier, 2000.

directly affect only parts availability. FIRST ultimately chose to use more-traditional wholesale supply metrics. That said, such metrics are usually applied to organic support. The top-down approach built a logical basis for applying these metrics to a contractor. These metrics in effect conveyed information on Navy operational priorities to Boeing at the highest level consistent with Boeing's responsibilities under FIRST; they captured the essence of using operational requirements to define performance-based service metrics for a contract.

FIRST applied the joint Boeing/Navy approach used to identify metrics to every aspect of coordination relevant to an integrated support plan. This complex planning program took four years to complete. Despite good working relationships, Boeing and the Navy had to work at maintaining trust and communication. Stability among key personnel during the development program was important. Having a core negotiating group on both sides that never changed allowed Boeing and the Navy to forge a working relationship between individuals on each side who came to trust one another as acting in the interest of the joint program and not simply fronting for their sides. Facilitators helped IPTs stay objective and focused on FIRST rather than second-guessing potentially hidden agendas.

Maintaining the support of the senior Navy leadership through this development was critical to its success. Because of continuing turnover in the leadership, keeping the leadership informed and maintaining its support was a serious challenge for the FIRST program. Working with the Navy comptroller was especially important and challenging. The FIRST program kept its own leadership in NAVAIR well informed about its progress, assuming that NAVAIR would communicate with the comptroller. More direct communication would have been more effective. Unfortunately, because many view the comptroller as a watchdog more concerned with financial than operational capabilities, programs can be reluctant to involve the comptroller directly, particularly early in a program's lifetime. But the comptroller's support is critical to sustaining broader senior leadership support.

Source Selection

The FIRST program was envisioned from the beginning as a partnership between the Navy and Boeing, the original equipment manufacturer for the Super Hornet. The partnership built on Boeing's ongoing production of the Super Hornet and the support normally expected during interim contractor support. Therefore, the Navy awarded the central contract in the program as a sole-source contract to Boeing.

Beyond this central contract, the main source selection decision involved the question of whether the Navy or Boeing would provide depot-level maintenance for the parts in question. Boeing's initial plan placed this work in Boeing, but the Navy's cost analysis indicated that the Navy could do the work at a lower cost. Therefore, an administrative decision was made to keep the depot maintenance within the NADEPs. No formal public-private procedures informed this decision.

Depot support work for components unique to the Super Hornet occurs primarily at NADEP North Island, with additional work at NADEPs Jacksonville and Cherry Point.¹⁶

Contract Type and Terms

The FIRST program uses a requirements-type, performance-based contract that gives Boeing "program management responsibility and authority to meet the program performance requirements defined" in the contract.¹⁷ During the two-year base period, a cost-plus-incentive-fee (CPIF) contract with award fee applies. During the following three one-year option years, a fixed-price-incentive (FPI) contract with award fee applies.¹⁸ This shift reflects a broader strategy in the program, which anticipates that as data on actual support performance and cost accumulate and the design of the support plan for the Super Hornet continues to mature, the contract should shift to

¹⁶ Cormier, 2000.

¹⁷ FIRST Contract, Sec. B-1.

¹⁸ FIRST Contract, Sec. B-1.

terms with higher-powered incentives. Reliable data were not available to set hard targets at the beginning. Better data should allow Boeing and the Navy to negotiate progressively firmer and more-demanding targets as the program continues.¹⁹ If the contract continues through all option years, as expected, data collected over the course of the contract will support ever more performance-based terms. The first year of a follow-on contract is expected to rely entirely on fixed prices.

Price levels were not included in the initial contract. Rather, Boeing proposed ceilings during the first year of the contract that set maximum levels for future negotiations.²⁰ These included FPI ceilings and maximum fees. Economic price adjustment (EPA) clauses would be negotiated for the last two years of the contract. Equitable adjustment, up or down, is negotiated routinely each year, based on changes in basic planning documents and other factors.²¹

Thresholds and levels of performance metrics govern the government's decision to execute options and to award a fee. Baseline levels of metrics at the beginning of the contract exceeded the levels that would have been expected from organic provision of the same services. The contract seeks to provide total savings or cost avoidance of 20 percent over the life of the program while maintaining performance "at or better than" performance targets.

The contract includes two award fees per year, whose levels are determined at the government's discretion on the basis of finely defined criteria that reflect changing priorities through the course of the contract. The contract identifies maximum levels of the fee in each

¹⁹ Performance targets went up over time in the initial version of the contract, but not because the Navy expected quick reliability improvements from Boeing. Rather, performance can be expected to improve during the ramp-up phase of any new system. And investment in wholesale inventory would continue through the early years of the contract, making it increasingly easy to perform well. In sum, the performance targets in the contract are carefully coordinated with the Navy's broader logistics support plan for the Super Hornet.

²⁰ FIRST Contract, Secs. H-1, H-14.

²¹ FIRST Contract, Sec. H-2.

period. A detailed award-fee plan explains how the Navy decides what portion of this maximum to award to Boeing.²²

The award fee for the first period, for example, addresses supply chain management efforts before the contract began (15 percent weight), information services connectivity achieved (35 percent), fleet support (25 percent), and supportability (25 percent). The award-fee plan defines each of these precisely, often in terms of several subfactors with further weights and the evaluation criteria that the Navy uses to rate each subfactor. Starting with the second period, the award fee becomes more standardized in structure but, as illustrated by the weights in Table F.1, shifts in emphasis.²³ As can be seen, the emphasis steadily migrates from more subjective factors at the bottom of the table to more objective and quantitative criteria at the top.

Over time, performance is expected to improve as cost savings and system improvements lead to improvements in services; however, initially the schedule is based on the standard initial ramp-up and the growing investment in the whole inventory. Boeing is incentivized to

Table F.1
Weights from FIRST Award-Fee Plan for Periods 2–6
(in percent)

Evaluation Criteria	Weight				
	Period 2	Period 3	Period 4	Period 5	Period 6
Total supply response time (SRT)	30	45	45	95	95
Total time on backorder (TOB)	5	5	5	5	5
Total aircraft-carrier stock effectiveness			10		
Total fleet support	35	25	20		
Supportability	30	25	20		

²² FIRST Contract, Sec. B-1; Attachment 12, "Award Fee Plan."

²³ FIRST Contract, Attachment 12. The actual factors are far more elaborate, in terms of subfactors and weights, definitions for specific metrics associated with each subfactor, and evaluation criteria for each subfactor.

keep looking for places where beneficial changes might be made proactively, which limits the number of “emergency” replacements. Boeing is responsible for the performance of major suppliers and tends to incentivize them to cut costs as well.

The contract provides a detailed plan for managing unexpected surges in demand against the program. It allows equitable adjustment for a large enough surge in annual flying hours and allows relief from performance targets if a surge is sustained.²⁴

The contract also defines operating arrangements for the FIRST program in close detail. For example, it defines:²⁵

- The terms on which Boeing and the Navy coordinate their actions to propose, approve, and fund engineering changes that affect military operations, safety, and supportability.²⁶
- The terms on which Boeing and the Navy can buy relevant parts from one another.
- The data that the Navy must provide to Boeing on its aircraft delivery schedule, flying-hour profile, carrier deployment, site activation schedule, weapon system demand, operational factors, training base utilization factors and other data that Boeing requests, and what happens when these data change. It also defines the specific Boeing data that the Navy can access.²⁷
- Specific data rights and responsibilities of the Navy and Boeing, including protection of proprietary data.²⁸
- Links between this program and other support programs relevant to the Super Hornet, such as the integrated logistics support (ILS) program and the sustainment section of the multiyear

²⁴ FIRST Contract, Sec. H-3, Attachment 9, “Surge Plan.”

²⁵ FIRST Contract, Sec. C-2.

²⁶ FIRST Contract, Attachment 14, “Engineering Change Matrix.”

²⁷ Fiore, 2000.

²⁸ FIRST Contract, Sec. H-6, Attachment 13, “Rights in Technical Data and Computer Software.”

aircraft production contract. The contract lays out consequences for such programs not remaining aligned with one another.²⁹

- Boeing's responsibilities (even though NADEPs perform depot maintenance on the parts in the contract) for correcting items that do not work following repair, through repair, overhaul, modification, etc., and for maintaining sufficient reparable assets and repair parts to provide this function.³⁰

There are performance monitors for each key area of the contract. They look at details and interface with the fleet, and they are always members of standing FIRST IPTs. Quality assurance occurs through routine monitoring of metrics as specified in the award-fee plan and generated in the Navy's standard logistics information management systems. Deep transparency of data systems between Boeing and Navy makes this possible.

The Defense Contract Management Agency (DCMA) approved the performance monitoring and auditing processes and then allowed those processes to function without further detailed oversight of each individual support action. While FIRST gives the Navy the right to do inspections, DCMA has certified Boeing's quality control system as compliant with requirements, so Boeing is allowed to self-monitor. Boeing and key subcontractors had previously been certified to various applicable International Organization of Standards (ISO) 9000 standards, so this sort of process-based certification came naturally to them.³¹

²⁹ FIRST Contract, Sec. H-18. Because the FIRST and ILS programs address similar and related issues, coordination is required to reduce duplication and ensure that each program can lean on the other for work under way there. FIRST hopes ultimately to roll the sustainment portion of the production contract into the FIRST contract to ensure complete integration.

³⁰ Boeing is responsible for transitioning (as it normally would be under interim contractor support) the depot workload to an organic source at the NADEP. It is also responsible for developing a second source as needed to cover shortfalls or undercapacity at the NADEP. If shortfalls or undercapacity occur, Boeing is responsible for working with the Navy to find solutions.

³¹ The contract does not require ISO certification. ISO certification verifies that specific processes are in place, documented, and used in practice but does not guarantee any particu-

Execution

Boeing's Super Hornet production line began delivering new aircraft to the Navy about 18 months before the FIRST contract began operation, and it had delivered 67 aircraft to the Navy by 2001.³² Strike Fighter Squadron 115 (VFA-115), the first operational E/F squadron, with nine aircraft, was declared "safe for flight" in June 2001, a month after the FIRST contract was awarded; deployment occurred a year later.³³ Pre-deployment aircraft operations provided initial data that FIRST could use as a baseline for performance expectations; but without actual deployment data, FIRST could use these initial data only with caution.

FIRST uses a suite of highly capable information management systems to manage data. The HornetWeb is a joint Boeing-Navy management and data tracking system that anyone with proper access can use to track the status of a particular part or service request and ask who requested what part, who signed off on it, who signed it out to FedEx, where it is in the Fed Ex system, and so on. It virtually links relevant data from operational databases at many locations without having to create and maintain a common data warehouse. By giving all authorized Navy and Boeing personnel access to the same data, it creates a common operational picture that reflects near-real-time operational data. Data in the HornetWeb focus on CONUS activities.

The Navy built HornetWeb as an integral part of the development and production process for the Super Hornet itself. HornetWeb seeks to eliminate problems that the Navy had in earlier programs, where the Navy lacked insight into the performance and management process. The most immediate effect expected for FIRST is a reduction

lar level of performance. It is, however, well suited to monitoring the use of processes that, in practice, produce desired outcomes. ISO 9000 requires that processes exist for identifying failure to achieve targets and for recovering expeditiously from such failure, without specifying what the targets should be. For details, see <http://www.iso.ch/iso/en/ISOOnline.frontpage> (as of 20 May 2003).

³² F/A-18 Public Affairs Office, 2001.

³³ "Super Hornets Inch Closer to First Deployment," 2001.

in duplicative service orders and unnecessary cannibalization actions, which should help cut support costs and improve readiness.

Security presented a problem in initial use of the HornetWeb to support FIRST. HornetWeb is secure by Web standards—access by password, secure data transfer, and so on—and data in HornetWeb are as secure as any data moving in FedEx information systems. But HornetWeb is not certified as suitable for classified data transmission. Nonetheless, fleet Internet security (“firewall”) policy is very decentralized, making it difficult to ensure adequate access to HornetWeb by necessary personnel at bases or on ships that have different standards for access to such networks.

FIRST is also using a variety of information management tools to automate document management and exchange, including interactive electronic technical manuals for maintenance and assets records, an electronic data access library for supplier drawings, and a logistics support analysis database for logistics planning.³⁴ These reduce costs directly by eliminating the need to create and manage paper documents, and they cut costs and improve readiness by ensuring that all authorized personnel in the FIRST program use the same, up-to-date technical data to support the Super Hornet day-to-day and to make decisions on new investments.

In general, 9/11 has complicated the sharing of classified data by raising concerns about security. As the classification of operational logistics data has risen from “For Official Use Only” to Confidential or even Secret, data exchange increasingly occurs through the Secret Internet Protocol Router Network (SIPRNet), complicating highly integrated programs such as FIRST to some degree.

FIRST began with \$15 million in R&D seed money to jump-start a reliability fund. The fund pays for improvements in reliability or maintainability of the parts in the program. FIRST maintains formulas that establish a baseline and a measure of cost savings relative

³⁴ Fiore, 2000.

to the baseline that result from such investments.³⁵ The fund captures a share of these savings, which FIRST can then use to make additional investments. FIRST intends the fund to be self-renewing. The Navy does not know how much investment of this kind can occur before FIRST encounters diminishing returns. The outcome is likely to depend heavily on opportunities offered by the Super Hornet itself and the FIRST program's ability to identify these opportunities.³⁶

To the full extent possible, FIRST is structured to induce Boeing to consider both production and support when considering improvements in parts. In the past, the two phases were contractually separated in ways that made it hard for the Navy to achieve savings in one contract that did not increase costs in the other. The FIRST contract attempts to make Boeing the residual claimant for innovations that affect production and support. If Boeing can identify savings relevant to both phases, FIRST allows both Boeing and the Navy to benefit from such savings.

That said, FIRST gives Boeing authority to make decisions relevant to activities that Congress traditionally funds with different kinds of budget accounts. One account (APN1), for example, funds nonrecurring logistics support, while another (APN6) funds repair of "reparables." Constituencies grow up around each type of funding inside the Navy, leading to conflicts over turf when anyone tries to reallocate funding authority within the Navy. Standard DoD budgeting requires that the Navy identify requirements for each type of funding each year and authorize these funds in the multiyear Planning, Programming, and Budgeting System process. The Navy then transfers monies authorized in this way to Boeing, limiting Boeing's ability in any year to make the trade-offs that are most likely to enhance the Navy's strategic goals in that year. This is a problem in any large PBSA. It is a particular problem in FIRST, because the program delegates so much decisionmaking authority to Boeing and seeks to create incentives that induce Boeing to use its discretion to drive the

³⁵ FIRST manages costs associated with reliability improvements separately, under close scrutiny (FIRST Contract, Sec. H-22).

³⁶ For a review of programs to invest in R&M improvement, see Alexander, 1988.

support costs of the Super Hornet down. Unnecessary limitations on its discretion limit its ability to do this. These limitations are reflected in an odd structure of contract line item numbers in the contract and even in decisions to segregate some tasks in separate contracts.

Follow-on

If FIRST performs as well as hoped, the Navy may extend its scope in the follow-on contract, first to cover all parts in the F/A-18-E/F, and then to cover all versions of the F/A-18 fleet.³⁷ If the philosophy underlying the design of FIRST remains in place, such expansions will presumably lead the Navy to reconsider the performance metrics used in FIRST. Broader coverage of parts associated with weapon systems should make it easier to use higher-level, system-availability metrics, closer to the warfighter. Such metrics would align Boeing's interests still more closely with the Navy's.

³⁷ FIRST Contract, Appendix B, "Definitions."

Rapid Response to Critical Systems Requirements Program

Services Involved and Key Players

The Rapid Response to Critical Systems Requirements (R2CSR) program “streamlines the process for government systems managers to quickly obtain the engineering and manufacturing support required to sustain older weapon platforms and communications, electronic warfare, and information systems.”¹ Services available include²

- Prototype fabrication and installation
- Systems integration and installation
- Technical data packages
- Packaging, handling, storage, and transportation
- Engineering studies and analyses
- Cost-benefit analyses
- Laboratory analyses
- Quality assurance program development
- Configuration management
- Communications and networking

¹ <http://www.r2csr.com/about.cfm>; <http://www.learinc.com/lsi-r2csr/FAQ/faq.htm#32> (as of 21 June 2002).

² From <http://www.r2csr.com/about.cfm> (as of 19 June 2002).

- Software and firmware engineering
- Logistics and sustainment support.

R2CSR chose three private-sector teams that could compete quickly, over the term of the contract, for work on these types of task orders brought to the program from buyers in the Army and elsewhere. Satisfied, repeat R2CSR customers include all DoD services, the State department, the Transportation department, NOAA, NASA, and others. Over the life of the program, the Air Force has been the largest customer for R2CSR services.

The Army Communications and Electronics Command (CECOM) runs the R2CSR program office. The prime contractors for the three participating teams are ARINC, Lear Siegler Services, Inc., and Lockheed Martin. Each team has an omnibus, indefinite quantity, indefinite delivery (IDIQ) contract with the Army. The prime contractors each have a large set of team members (which have varied over the course of the program): ARINC, 22 to 24,³ Lear Siegler Services Inc., 22, and Lockheed Martin, 16 to 20.⁴ These team members include government organizations, such as Tobyhanna Army Depot. Companies can participate on more than one team, even during competitions for a specific task order. Team members in turn rely on many other, lower-tier “vendors” not formally named in the program. One team has involved more than 1,100 firms in tasks it has won under the program.

CECOM is preparing a follow-on program for a broader array of services that will be called simply the Rapid Response (R2) program.⁵ It will not be limited to “critical items”—items on existing systems that are obsolete—and will add R&D services.

³ From <http://www.r2csr.com/about.cfm> (as of 19 June 2002).

⁴ From <http://www.r2csr.com/about.cfm> (as of 19 June 2002).

⁵ CECOM R2CSR homepage at <https://r2csr.monmouth.army.mil/> (as of 21 June 2002). Pulled down in various “CECOM R2CSR xxxx” files.

Key Dates and Dollar Size

The R2CSR program has run from 1998 to 2003; the combined, five-year ceiling on the three contracts is \$5.4 billion.⁶ Each vendor's contract has a ceiling: \$1.41 billion for ARINC, \$1.85 billion for Lear Siegler, and \$1.78 billion for Lockheed Martin.⁷ In its first 16 months, the program served more than 200 customers with over 300 delivery orders, work that was worth over \$1 billion.⁸ After four years, the program had initiated over 560 delivery orders and had about 500 active delivery orders. These tended to range in value from a few thousand dollars to \$10 million, with one as high as \$50 million.

High-Level Policy Goals That Motivated the Creation of the Program

The program seeks to

- Streamline buyers' access to providers well suited to perform the range of activities that the program covers.
- Do this while maintaining both effective cost and quality discipline with respect to these providers and high-quality program support at reasonable cost to buyers.
- Do this while protecting the small and disadvantaged businesses' opportunities to benefit from federal government procurement programs.⁹
- Maintain a cost-effective industrial base to supply the aging platforms in the Army and elsewhere.¹⁰

⁶ CECOM R2CSR homepage at <https://r2csr.monmouth.army.mil/> (as of 21 June 2002).

⁷ "Breaking News: Army Awards \$5b in IT Pacts," 1998.

⁸ CECOM R2CSR homepage at <https://r2csr.monmouth.army.mil/> (as of 21 June 2002). Pulled down in various "CECOM R2CSR xxxx" files.

⁹ <http://www.r2csr.com/about.cfm> (as of 19 June 2002).

¹⁰ Dornheim, 1999.

R2CSR now costs a typical buyer about 1 percent of the total value of a delivery order; a General Services Administration (GSA) multiple award schedule (MAS) would cost about 3 percent to use. R2CSR provides a higher level of services for a typical user than GSA does.

Socioeconomic Goals

Setting and meeting acceptable goals for using small and disadvantaged businesses has been the biggest challenge for R2CSR. The small business utilization target is 20 percent of expenditure; an additional target of 5 percent is set for disadvantaged businesses.¹¹ Each team is required to achieve these targets throughout the program, the penalty being that if it fails to do so, the Army will not exercise any further options on its contract.

One team had difficulty during the first year meeting the required targets. It worked with CECOM to build a get-well program, brought more small businesses into its team, and over time, has gotten well and now exceeds all targets on cumulative revenue earned. Four years into the program, actual levels for the program as a whole were at 51 percent total and well over 5 percent for disadvantaged business. Each team exceeded each target.

In formal calculations relevant to the targets, only the prime contractor and the direct subcontractor to the prime count. R2CSR is seeking to develop a Web-based reporting process that can track dollars going to small and disadvantaged businesses in three tiers of providers on a monthly basis. Initial efforts by two primes indicate that this can be done. A problem likely to be more difficult to resolve is finding a way for users of R2CSR to get credit for using the small and disadvantaged businesses in the R2CSR program. Today, the Army gets credit for all such businesses used, because of the way that reporting is done. It will probably be easier to implement a new data-

¹¹ Dornheim, 1999.

base than to make the basic organizational changes that would be required to change reporting.

Prime contractors pay a great deal of attention to assuring the quality and performance of the small and disadvantaged businesses they use. They screen subcontractors, using past performance, past direct experience with them, financial security, and other criteria, to limit management programs during execution. They look for small and disadvantaged businesses with unique, niche capabilities that can enhance the team as a whole. They look for subcontractors with pre-existing relationships with the buyers likely to use R2CSR.

Prime contractors take advantage of the quick decisionmaking that is typically easier in a small firm and try to integrate small providers in ways that overcome their inability to handle large tasks by themselves. Primes mentor small and disadvantaged providers to improve their integration with the prime and hence their performance. For example, mentoring can bring firms up to a prime's sourcing standards, such as certification to ISO 9000.¹² Mentoring can be a challenge for some primes, because there is sometimes a natural suspicion about the prime's willingness to share opportunities with other members of the team. Successful teams overcome this suspicion.

These actions are the prime contractor's responsibility, but the way in which they appear in a team's plan for using small and disadvantaged businesses can affect the evaluation of a team during source selection. When small or disadvantaged team members do not work out for any reason—because they are hard to work with, do not market enough, or do not perform as expected, for example—prime contractors can and do replace them. So screening continues throughout the program.

¹² ISO 9000 is a family of standards maintained by the International Organization for Standardization (ISO). It distills good management practices into a set of standardized requirements for a quality management system. Many buyers now use ISO 9000 to certify the quality of their providers. For details, see <http://www.iso.ch/iso/en/ISOOnline.frontpage> (as of 8 May 2003).

Other General Information

CECOM runs the R2CSR program from Ft. Monmouth, New Jersey; the U.S. Air Force Oklahoma City Air Logistics Center, Tinker Air Force Base, Oklahoma; and the Defense Supply Center in Richmond, Virginia.¹³ All work is performed on location at government locations in and outside the United States.¹⁴ CECOM's program management includes about 20 people—engineers, contracting, legal, and small business representatives.¹⁵

The program office is one part of a triangle that also includes buyers of services and providers of services. It helps them link up, and it helps them manage their interactions. One of its functions is to help buyers learn how to participate in the program. It verifies that their requests are "in-scope"—that is, eligible to use the R2CSR vehicles—and it helps them transform their requirements into a statement of work for a delivery order that can generate proposals from participating providers. It also advises buyers during the source selection and manages all money committed through the program, using military interdepartmental procurement requests to move money from buyers to the Army and then to providers.

Primes and team members share engineering and product availability data (thus speeding competition) over an integrated data environment like that of the Joint Engineering Data Management Information data repository at the Air Force's Oklahoma Air Logistics Center.¹⁶ The program is close to being paperless for unclassified delivery orders (most work on the program is unclassified).

Planning for the R2 follow-on is well under way. The Army plans to qualify more than three teams in the new program, in part to increase opportunities for small and disadvantaged businesses. Offering teams expect to build larger sets of team members to help them

¹³ Dornheim, 1999.

¹⁴ U.S. Department of Defense, "Lear Siegler Services, Inc.," 1998.

¹⁵ U.S. Department of Defense, "Lear Siegler Services, Inc.," 1998.

¹⁶ Dornheim, 1999.

service the full breadth of the new program. They are also seeking new members that have existing relationships with buyers currently not well served by available contracting vehicles such as R2CSR and the Flexible Acquisition and Sustainment Tool (FAST) program.¹⁷

Key Steps in Acquisition

Beginnings

CECOM has used omnibus contracting for a long time. The Air Force approached CECOM to create the R2CSR program in 1997, building on its highly successful CECOM Low Tech Omnibus contract, on which Lear Siegler Services, Inc. was the incumbent. This was CECOM's first omnibus contract; it supported systems integration and prototyping, especially for avionics suites. For R2CSR, CECOM was able to move from conception to contract award very quickly—in about three months—because the program office had the right skills and had coordinated its actions carefully with relevant leaders at HQ, Department of the Army, and the right acquisition offices within CECOM. Everyone shared and supported a single vision of the effort throughout.

Source Selection

CECOM used a best-value competition to choose the three teams for the R2CSR program. It used four criteria, ranked from most to least important: technical proposal, past performance, plan for small and disadvantaged business participation, and cost.

The R2CSR competition revealed that the Army could not discriminate among offerors on technical grounds. The past performance evaluation generated 1,200 questionnaires, which drowned the performance risk assessment group in data without identifying any risks that allowed the Army to discriminate among offers. Cost, based mainly on labor rates, turned out to be particularly difficult to assess.

¹⁷ See Appendix H for details on the FAST program.

The evaluation team used a statistical model to identify low costs, which it questioned and had offerors adjust. The team did not worry so much about high labor costs, which it expected ongoing competition to discipline. Each contract was awarded on 29 July 1998.

Because of this experience, the R2 follow-on competition will emphasize the management plan more than anything else. Managing cash flow and vouchers has been a challenge in the R2CSR. Meeting obligation, commitment, and other targets is getting trickier. Subcontractors are very concerned about being paid on time; withholds and other delayed payments required when using some types of contracts complicate this. The R2 follow-on will also treat past performance differently to avoid being overwhelmed again. It will assess offerors other than the prime only if they plan to account for more than 25 percent of the total program. With greater emphasis on management, paying more attention to the primes relative to other team members also makes sense.

Contract Type and Terms

Each of the three contracts includes a two-year base period and three consecutive one-year options providing for potential extension until 28 July 2003.

These contracts define the arrangements for accelerated competitions among the three teams for individual delivery orders (DOs). Each DO competition can be shaped to the priorities of the buyer initiating a DO; they are typically best-value competitions that limit the importance of cost in selections. A competition begins when a buyer provides a full project description, presented as a request for proposal (RFP), and funding authorization to the R2CSR office. The R2CSR office sends the RFP to each team; each has seven calendar days to respond. Review of the proposals is designed to allow a source selection for each DO to occur quickly enough so that work on the DO can begin within 21 calendar days of issuing the initial RFP.¹⁸

¹⁸ "About R2CSR: The R2CSR Advantage," from <http://www.r2csr.com/about.cfm> (as of 3 December 2002).

Buyers organize source selection evaluation teams, performance risk assessment groups, and other processes that actually select a source.

In practice, the program has had more difficulty maintaining the 21-day deadline than the seven-day deadline. The larger a DO, the more challenging the deadlines; DOs larger than \$10 million are hard to keep within these deadlines. Buyers want to take the time necessary to ensure that they complete an effective source selection.

The seven-day deadline, of course, is challenging for providers and, in the beginning, was a barrier to getting good participation in some firms. The firm as a whole supported R2CSR as a valuable marketing vehicle, but individuals tapped to write proposals quickly were less enthusiastic. That appears to be less of a problem now. Providers often market their services in ways that prompt RFPs through R2CSR and so know when to expect an RFP and are ready to respond when it comes. However, the buying organizations requesting proposals are not always available to answer questions about their requests, and their inaccessibility does not automatically extend the seven-day deadline. Furthermore, the deadline gets tougher when higher-level approvals are required to make a firm-fixed-price offer or when the prime has difficulty choosing which subcontractors to involve.

The team that markets an idea typically wins the competition—if for nothing else, simply because it has more time to prepare a proposal. Despite this pattern, competitions generally draw at least two offers. One team reported that over half of the tasks it has won were not tasks it had initially marketed. And offers can be worth the preparation costs, even if the chance of winning is low, because they limit what competitors earn from the program; the competitions among offerors are effectively about more than simply winning workload on tasks. Competitions are intense, because R2CSR maintains a database that allows all teams to gather data quickly on past DO competitions and use the data in upcoming competitions; such comparisons tend to force margins down in these competitions. A competition has never failed to draw at least one offer.

A buyer has great flexibility to frame the source selection criteria and contractual terms for each DO. Any form of best-value competi-

tion can be accommodated. Each contract defines maximum labor rates for a wide range of labor categories. These can support time-and-materials and fixed-price terms, as well as appropriate combinations of the two.¹⁹

Execution

R2CSR is designed to link buyers and providers effectively, but buyers must always work within the scope of the DOs developed in the program. Keeping buyers “in-bounds” can be especially challenging, because the contract line of responsibility is more distant from the buyer or user than in a traditional service contract. And both the government’s and the prime contractor’s program offices typically lie between the buyer and provider on the contracting track. Anticipating problems on that side of the track, particularly with smaller providers that tend to bury problems until they are too big to address, is a challenge. An effective, direct link between buyer and provider is especially important to quality assurance in these cases.

Competitions occur so quickly that they often do not spell out pertinent details of the tasks competed. Buyers and winning providers often initiate tasks with a kickoff meeting that feels much like post-award negotiation. The meeting ensures clear agreement on the parameters and assumptions of the task. This mode occurs even for firm-fixed-price competitions. Providers build a proposal based on their known capabilities and how they think the task should be structured; the kickoff meeting verifies that the buyer understands and agrees.

Different customers interpret important elements of the Federal Acquisition Regulation (FAR) differently, an unavoidable aspect of using such a flexible set of regulations. For a program such as R2CSR, which services buyers from so many organizations and does so on short timelines that limit the time available for clarification and mutual agreement on what is expected, this flexibility leads to excep-

¹⁹ CECOM R2CSR homepage at <https://r2csr.monmouth.army.mil/> (as of 21 June 2002). Pulled down in various “CECOM R2CSR xxxx” files.

tional problems. Differing interpretations are a challenge for the CECOM program office and for the provider teams.

The “color of money” is a serious problem on this program for a number of reasons. Many different sources provide funds for this program, and funds from different sources cannot be commingled. Moreover, funds dated for expenditure within different periods cannot be commingled. One task can involve as many as 20 different kinds of funds, all of which must be tracked and controlled, so the job of balancing payments and receipts for many different projects with different kinds of money presents serious accounting and operational challenges. A revolving fund would simplify some of these, but it would work only if funds could be commingled between years and across fences within a year.

Different organizations use various rules to avoid problems with the Antideficiency Act,²⁰ which means CECOM is required to handle funds—which look the same to it—in different ways to satisfy these varied rules. When disputes arise, the comptroller is not responsive. Waiting for a final resolution can tie monies up, and R2CSR ends up having to cover its costs while it waits for approval to employ funds from its buyers. For example, following 9/11, emergency supplemental funds came to R2CSR to support responsiveness. But it took months to get an interpretation of how R2CSR could use the funds before R2CSR could respond.

R2CSR survives by attracting buyers that want access to the providers it has. This means that there must be a continuing effort to make potential buyers aware of the program’s capabilities. The CECOM program office cooperates with the three teams to market the program in various industry meetings. Meanwhile, each team markets the program in a more adversarial way through its own access channels. Every member of a team is expected to participate in this

²⁰ The Antideficiency Act, now a part of U.S. Code Title 31, prohibits federal employees from “entering into contracts that exceed the enacted appropriations for the year” or “purchasing services and merchandise before appropriations are enacted.” Federal agencies use a wide variety of regulations and other mechanisms to ensure that this does not occur. For more information, see <http://www.whitehouse.gov/omb/circulars/a11/2002/S145.pdf> (as of 8 May 2003).

effort. Marketing is an integral part of the execution of the program and calls for an unusual mix of public-private cooperation and private-private competition.

Follow-on

The R2 follow-on to the R2CSR will differ from it in a number of important ways. It will cover a wider range of activities, as noted above, and seeks to choose more than three teams to participate in ongoing competitions. In addition, teams with small primes will be guaranteed at least two slots in the program. These aggressive small business goals are a response to pressure from Congress.²¹

²¹ Strong opposition to the program persists in Congress, where R2 is one of 10 large service contracting programs targeted for attention by Rep. Nydia M. Velázquez (see House Small Business Committee Democrats, 2002).

Flexible Acquisition and Sustainment Tool Program

Services Involved and Key Players

The Flexible Acquisition and Sustainment Tool (FAST) program provides contracting vehicles for Air Force system program offices (SPOs).¹ The program allows pre-selected company teams to make offers on specific task orders (TOs) on a schedule that delivers a contractual vehicle for needed services within 19 days of an initial request for task proposal (RTP).² Services account for 57 percent of the realized scope of the program.³

Goods and services covered include:⁴

- Weapon system sustainment
- Engineering
- Logistics, infrastructure, and systems administration
- Manufacturing support
- Financial management
- Deployment support
- Spare parts contingency planning, manufacturing and installation

¹ An unofficial website for the FAST program provides an unusually broad, if disorganized, perspective on the program. See <http://afmcfast.bizland.com> (as of 12 May 2003).

² Abacus Technology Corporation, n.d.

³ Armor, 1999a.

⁴ Abacus Technology Corporation, n.d.

- System, subsystem, and component repair
- Technology insertion
- Integrated digital environment computer equipment
- Quality assurance
- Software engineering services and data management.⁵

The program office headquarters is at the Warner Robins Air Logistic Center (ALC), Robins Air Force Base (AFB), Georgia. Program management activities also occur at Warner Robins; Ogden ALC, Hill AFB, Utah; and Oklahoma City ALC, Tinker AFB, Oklahoma.

Six contractor teams share in a seven-year, \$7.4 billion Air Force weapon system support program. Two slots were reserved for teams led by small business. The Air Force ultimately awarded three such small business-led teams slots in the program.⁶ Contractor team leaders are Boeing, Lockheed Martin, Modern Technologies Corp. (MTC), Science Applications International Corporation (SAIC), Support Systems Associates Inc. (SSAI), and Technical and Management Services Corporation (TAMSCO).

The roster for the program is flexible. In June 2003, there were about 353 companies, 203 of which were small businesses, involved in the program (including team leaders and team members). The program allows prime contractors (team leaders) to change their subcontractors (team members) based upon cost or requirements considerations or unsatisfactory performance.⁷ New members must submit labor rates comparable to those offered by the original participants for Air Force approval. Subcontractors are free to join multiple teams, at the discretion of the team leaders.

⁵ U.S. Department of Defense, 2001b.

⁶ Headquarters, U.S. Air Force, 2001.

⁷ Headquarters, U.S. Air Force, 2001.

Key Dates and Dollar Size

The team awards were announced on 13 July 2001, and the base contract runs through August 2006, with one two-year option beyond that.⁸ The total size of the contract award is approximately \$7.4 billion over seven years (including option years).⁹

High-Level Policy Goals That Motivated the Creation of the Program

Three goals helped shape the FAST program:¹⁰

1. Meet program managers' needs by being flexible, fast, and user friendly. By developing a single program for all Air Force buyers to use, the Air Force expected to cut the time required to compete new TOs and begin work on them. Specialization and focus would improve the program's ability to serve Air Force customers.¹¹
2. Reduce cost by eliminating a contracting service surcharge, achieving economies of scale in program management, and using competition to discipline offers for TOs. Air Force SPOs were paying non-Air Force programs, especially the Army Rapid Response to Critical Systems Requirements (R2CSR) program, to procure goods and services.¹² The average pre-FAST surcharge on goods and services procured for the Air Force from other contract offices was 5 percent of the cost of the contract, with charges ranging from 1 to 18 percent. The Air Force thought it could cut this cost by at least 1 percent by setting up its own contracting

⁸ Headquarters, U.S. Air Force, 2001.

⁹ U.S. Department of Defense, 2001a.

¹⁰ Greene, 2000.

¹¹ Ailinger, 2001. Evidence available among those designing the program suggested that the savings could be as high as 5 percent.

¹² Greene, 1999b. For details on R2CSR, see Appendix G.

program, generating savings of over \$100 million a year for the duration of the program.¹³

3. Increase dollars to small business through direct awards to small prime contractors and aggressive subcontracting goals, and take care not to disturb current small and disadvantaged, Sec. 8(a) contracts. Intense congressional interest made effective participation of small and disadvantaged businesses a key goal as well.¹⁴ Focus on the small business goal grew through the course of the acquisition.

Different high-level leaders ultimately advocated the program for different reasons. OSD tended to like its focus on the needs of SPO managers and its attempt to improve service for them; the Air Force Small Business Office, the first office in Headquarters Air Force involved, supported its plan for making small businesses prime contractors and generating opportunities for small and disadvantaged subcontractors. Acquisition officials in Headquarters Air Force liked its reduction of payments to the Army, which is what ultimately brought the support of the Secretary of the Air Force.

Socioeconomic Goals

Providing acceptable opportunities for small and disadvantaged businesses, while serving the primary interests of the SPO managers who use FAST, has been the most difficult challenge that the FAST program office has faced. OSD's first involvement in the program grew from bundling concerns. OSD testified at a hearing on DoD's contract bundling policy before the House Small Business Committee in November 1999, which drew attention to the nascent program.

The program had developed a draft acquisition plan and was holding its first Industry Day that month. At that time, the plan an-

¹³ Ailinger, 2001.

¹⁴ Armor, 1999a; Greene, 2000.

ticipated awarding three to five prime contracts under the program; one would be set aside for a small business, and subcontracting requirements would be set for a fixed share of revenues to flow to small business.¹⁵ Air Force Material Command (AFMC), where FAST was under development, was not performing well against the goal of moving 22 percent of DoD obligations for contracts to small businesses. Small business participation in AFMC dropped from 12.5 percent in 1995 to 9.8 percent in 1999, and participation by small disadvantaged and women-owned businesses fared even worse, dropping from 4.1 to 2.3 percent for minorities and from 0.9 to 0.7 percent for women.¹⁶ As a result, House members expressed concerns in the hearing that “mega-bundling” would severely limit small businesses’ ability to compete for the right to participate in the program.¹⁷

Under pressure, the FAST program increased the number of prime contracts it planned to award and created two set-asides for small business prime contractors. It stated an intent that 15 percent of monies obligated through the program go to small businesses and a requirement that 23 percent of monies for subcontractors go to small subcontractors. Failure to achieve this requirement would affect past performance assessments in competitions for TOs under the program.¹⁸

Phoenix Scientific Corporation and the Small Business Administration (SBA) protested the form of the acquisition to the General Accounting Office (GAO), arguing that it violated the Competition in Contracting Act of 1984 (CICA) and the Small Business Reauthorization Act of 1997 (SBRA). In its first judgment on the SBRA, GAO ruled that given the serious challenge the Air Force faced in finding quick support for spare parts on aging aircraft with

¹⁵ Brown, 1999b.

¹⁶ AFMC “accounts for about 21 percent of the Defense Department’s total purchasing budget, which grew from \$23 billion in 1995 to \$24.5 billion this year, according to figures provided by the Small Business Administration office at Robins.” Brown, 1999a.

¹⁷ Talent, 1999.

¹⁸ Greene and Thompson, 2000.

no known vendor, the opportunities that the FAST program was building in for small business met the requirements of the law.¹⁹ Phoenix and the SBA appealed the GAO decision to the Secretary of the Air Force and the White House. They sent letters signed by House members and business groups to the Defense secretary, arguing that GAO and Inspector General reports showed no savings from bundling, as required in the SBRA. They argued that FAST bundling would hurt contracting opportunities for small businesses for the seven years of the contract.²⁰ The Air Force rejected the bundling appeal in August 2001, noting that the program adequately protected small business and that bundling would save the Air Force at least \$100 million a year, a number SBA strongly disputed.²¹ The program also survived protests made on other grounds. Skepticism persisted in the House Small Business Committee, which spotlighted the FAST program again in a June 2001 hearing.²² OSD was involved throughout this process, supporting the FAST program in varying degrees but not confident about the key issues involved. The FAST program had great difficulty affecting the way OSD and Congress framed the program's treatment of small and disadvantaged businesses.

These various challenges slowed the FAST acquisition at least six months and forced the program to adjust its treatment of small and disadvantaged businesses. But it also gave the program a thorough legal scrub early enough that the final version of FAST used in its source selection stood up and allowed the program to go forward. The debates associated with these challenges have helped shaped the policy environment for programs that, like FAST, affect the status of small business, but they did not settle any issues definitively. New programs with similar bundling issues should anticipate congressional scrutiny and prepare carefully for it.

¹⁹ Peckenpaugh, 2001a.

²⁰ Allain, 2001.

²¹ Behr, 2000.

²² Peckenpaugh, 2001c.

In the final offers, the winning teams guaranteed that 25 percent of funds for subcontractors would go to small businesses, but they had great difficulty achieving this goal in the beginning. Many early sole-source awards for TOs, often associated with DoD's reaction to 9/11, did not have roles for small businesses, and small businesses had difficulty achieving the seven-day response time required in TO competitions. The teams developed plans to get well, and compliance was seen as being easier if subcontractors more than one tier below the prime could be included.

As of 2002, nearly 50 percent of subcontracting was going to small businesses. In comparison, before FAST, 7 percent of subcontracts went to small businesses. And now that Air Force users employ an Air Force contracting vehicle, full credit for all small businesses included in the program goes to the Air Force rather than to a contracting vehicle in another DoD component. It has been said that having three small businesses (rather than the reserved two) among the team leaders has made it easier for FAST to reach and surpass its goals for small business prime contractor participation.

Other General Information

The estimated cost of developing the FAST contract was about \$2.5 to 3.0 million. The FAST program has budgeted for fewer staff to operate the program than has the nearest equivalent program, the Army's R2CSR.

Key Steps in Acquisition

Beginnings

The FAST program began with an effort in the Warner Robins ALC Space and Special Systems Management Directorate, which set up a manpower support contract review team to evaluate services and

manpower support to program directors.²³ Although FAST provides contract support services, it was designed from the beginning from a broader program management perspective. The military commander of Warner Robins ALC provided strong support throughout, giving the program the authority to seek an aggressive new approach inside the Air Force. FAST quickly grew into a program that included all three of the Air Force's ALCs.

This acquisition became large and visible enough for the Principal Deputy Assistant Secretary of the Air Force for Acquisition and Management to have final authority on the acquisition strategy for FAST.²⁴ Based on feedback from industry councils that the Air Force writes bad requests for proposals (RFPs), Headquarters Air Force required new Air Force acquisition programs to involve industry early and often in the acquisition process. The FAST program employed practices developing at Warner Robins ALC that entailed (1) publishing program documentation for comment on the Electronic Posting System and ALC websites as it became available; (2) holding multiple Industry Days; and (3) conducting industry-involved risk assessments (IIRAs), which identify high-risk areas of a program, develop source selection factors that are true discriminators relative to these risks, identify the best contract type, and identify risk areas that require mitigation approaches to be developed. An IIRA is especially well suited to identifying risks relevant to potential offerors and to mitigating these in a way that is compatible with the mitigation of the government buyer's risk.²⁵ Even where such a meeting does not generate substantive ideas that the Air Force could not generate alone, it makes potential offerors part of the process and helps build consensus around the final acquisition strategy. Many large and small potential providers participated with Air Force personnel from the program

²³ Greene, 1999b.

²⁴ Armor, 1999a.

²⁵ Ayers, n.d.

and the Air Staff in the FAST IIRA.²⁶ During the company review process, the Air Force set up integrated process teams (IPTs) to aid integrated product and process development.²⁷ Products of these efforts fed the acquisition strategy.²⁸

These efforts established an “open-door” policy that allowed potential offerors to contribute ideas and best-industry-practices advice on how best to structure the FAST program to ensure speed and competition while protecting small business interests.²⁹ Early communication efforts created some confusion about the program’s intent, but this was quickly resolved. The open-door policy allowed a continuing exchange while ensuring that each potential offeror had the same access and the same information.

The IIRA held in November–December 1999 highlighted three major risks in the FAST program and proposed mitigations for them:³⁰

1. Unreasonably low labor rates. Mitigation: In the RFP, ask offerors to staff sample tasks and cost these staff. Then check for technical and cost realism of the proposals.
2. Management. Mitigation: Focus evaluation on sample tasks and a pop quiz to determine contractor’s ability to manage the broad scope of the contract.
3. Organizational conflict of interest (OCI).³¹ Mitigation: Incorporate provision in basic contract for application in TO competitions.

²⁶ “Flexible Acquisition and Sustainment Tool (FAST) Early Industry Involvement/Risk Assessment Workshop,” 1999.

²⁷ Flexible Acquisition and Sustainment Tool (FAST) Statement of Work,” 2000.

²⁸ Ayers, n.d.

²⁹ Armor, 1999a; Greene, 1999b; Greene and Thompson, 2000.

³⁰ Greene and Thompson, 2000; Smith, 1999.

³¹ OCI occurs when a source cannot render impartial advice or assistance to the government, a source’s objectivity may be impaired, or a source has an unfair advantage. Industry participants wanted clarification on how the contract would define OCI and implement controls over it.

The acquisition strategy and source selection gave each of these points close attention, to great advantage. The sample tasks in the final source selection had effective discriminatory value for technical/management and cost factors (see below).

The FAST program conducted three surveys to collect information early in the acquisition:³²

1. A spend analysis identified where SPO managers were buying services, how they were doing it, and why they chose the sources they chose. It asked the managers what characteristics they would like to see in an omnibus program and asked them for advice on how to shape the program. This effort included collection of data for a spreadsheet and face-to-face meetings to gather more qualitative information.
2. A survey of contracting firms asked them for information on their use of omnibus contracts.
3. A survey of over 30 government-sponsored omnibus vehicles identified their principal characteristics and collected data that could be used to compare their costs and benefits in a business case analysis. It collected lessons learned from these programs, sometimes with visits in person.

This information provided the basis for estimating that the FAST program would execute approximately \$1 billion a year in requirements. Further research based on the needs of ALCs over seven years yielded a total program cost of about \$7.4 billion. Alternative definitions of the program, based on broader work scopes considered early in its life, could have yielded a far larger FAST program. The program rejected them as being politically infeasible despite their potential value to the Air Force.

Information from early surveys also revealed that the Army R2CSR, which had been Air Force SPO managers' omnibus program of choice before the FAST program, offered the best benchmark to

³² Greene and Thompson, 2000.

use in designing the FAST program.³³ The FAST program hence began with the R2CSR design and adjusted it to take advantage of lessons learned from FAST market research. Four aspects of the design are particularly important: (1) Only Air Force users would be included in the program.³⁴ (2) The service would be free of charge to users. To facilitate this, the program decentralized its operations to the three ALCs that use the program. (3) FAST would use the same targets as R2CSR for cycle time, holding the time allowed to respond to an RFP at seven days, and the time from proposal to execution to 19 days. This reduction in time allowed was based on Air Force advances in Internet use that were being made while the FAST program was under development. And (4) FAST would use a larger number of provider teams to enhance competition for TOs and to provide more opportunities for small business.

Source Selection

The FAST program entered the source selection expecting to choose about four provider teams in an unrestricted best-value competition and two teams with small business prime contractors in a set-aside best-value competition.³⁵ The competitions used four source selection criteria:³⁶

1. Mission capability (technical), including organizational experience and capability, understanding of the requirement, and commitment to small and disadvantaged businesses.
2. Proposal risk, including risk assessment of proposal approach.

³³ Krauss, 1999; Greene and Thompson, 2000.

³⁴ The program retains the right to offer its services to other users if doing so advances the interests of the Air Force—for example, if serving the Navy could help a joint program with the Air Force. It has been approached by the Coast Guard, Navy, Army, DLA, and NASA. Alternatively, a non-Air Force user can get access through an Air Force program office. For example, FAST arranged a contract through which a program at Warner Robins ALC provides services that the National Imagery and Mapping Agency structured, pays for, and benefits from.

³⁵ Greene and Thompson, 2000; Peckenpau, 2001a.

³⁶ Tollinger, 1999.

3. Past performance, including written capability and past use of small business.
4. Price/cost, including labor rates, TO cost, and reasonableness.

The first three were of equal importance, and the fourth was less important than the other three.³⁷

The source selection evaluation team worked at Robins AFB; the performance risk assessment group (PRAG) worked at Hill AFB. Splitting the work spread the burden of the source selection across AFMC, but it also led to difficulties with ensuring that the two teams were pursuing common goals in their work. The PRAG's task was especially challenging because of the burden of work imposed by the large number of companies involved in offers under the program. The PRAG collected and assessed information on all team leaders and their critical teaming or joint-venture partners and subcontractors. Data collected covered program background and history, explanations of the relevance of past performance offered, major problems encountered and corrective actions taken, and quality awards earned. Data came from each offeror's input, questionnaires, other government buyers, interviews, and Contractor Performance Assessment Report System (CPARS) reports.³⁸ The PRAG reviewed data on over 350 firms. In any future program competition, FAST would limit the number of team members whose past performance was reviewed in detail; it would focus on a few critical members on each team. Once a firm was accepted as a provider under FAST, this information would no longer be used in TO competitions, because all teams had been certified as having acceptable levels of past performance; only past performance on more recent, relevant work, inside or outside the program, affects FAST-awarded work.

Analysis early in the program identified cost and pricing issues as a serious source of risk because they would affect not only the source

³⁷ Greene and Thompson, 2000.

³⁸ LeDuc, 1999. For information on CPARS, see <http://www.afmc.wpafb.af.mil/HQ-AFMC/PK/pkp/pkpa/cpars.htm> (as of 13 May 2003).

selection but also pricing through the course of the contract. So the FAST program developed a detailed pricing database, which had its first application in the source selection. To ensure the flexibility and breadth of work scope that the program sought, the FAST program demanded pricing information on about 140 labor categories, on site and off site in three geographical areas, for prime contractors and subcontractors, under different contract types, in five different years. This generated a requirement for as many as 1.7 million different rates in any firm's offer.³⁹ The FAST program developed an algorithm to assess the rate structures offered against a common template.

Contract Type and Terms

The FAST program organizes quick competitions for individual TOs among teams chosen in the initial source selection. Each team has an indefinite delivery, indefinite quantity (IDIQ) contract defining the terms of its participation in these TO competitions.⁴⁰ The appropriate FAST program office issues requests for operating plans (RFOPs) to all participating teams eligible in accordance with Fair Opportunities Clauses and OCI policy. The office seeks to ensure that all teams have access to exactly the same information in each competition. Each TO can have customized standards for source selection.⁴¹ Contractors have seven days from issuance of an initial RFOP to prepare an initial response (with additional time an option for particularly complex RFOPs); evaluation of the RFOP occurs within 12 working days of receipt by the customer, and an award of the winning bid is made within 19 working days of the initial RFOP call.⁴² Attendance at performance reviews is required with 30 days notice by FAST managers.⁴³ TO competitions occur under standard FAR Part 16 ar-

³⁹ Corr, 1999; Greene, 2000.

⁴⁰ U.S. Department of Defense, 2001b.

⁴¹ Armor, 1999b.

⁴² "Flexible Acquisition and Sustainment Tool User's Guide," 2001.

⁴³ "Flexible Acquisition and Sustainment Tool (FAST) Statement of Work," 2000.

rangements. FAR provisions are directly incorporated into the contract language.⁴⁴

From a competitive standpoint, primes and subcontractors are aggressive in seeking to present best-value proposals so they can win business; FAST promotes such competition as the entire basis for awarding work. Competition for TOs drives performance by itself, particularly when past performance is used as a criterion in such competitions. The program allows for additional incentives, including award fees, to be used in TOs on a case-by-case basis.

Execution

Warner Robins ALC manages the FAST program. It issues control numbers, maintains contract ceilings, reviews TOs post-award, and manages CPARS reports. Each of the ALCs has decentralized task-ordering authority. TO owners manage tasks post-award, including surveillance and CPARS for each TO. This decentralized approach spreads the burden of ongoing FAST program management among the users, reducing the visibility of program management costs, which are not recovered through fees imposed on individual TOs. The program was designed to simplify service acquisition processes at each ALC, so the hope has been that it would reduce the total costs to the Air Force of managing the service acquisitions covered by the program.⁴⁵ When setting up this structure, the FAST program office discovered that manpower costs were about equal to what they were in the pre-FAST programs used for service contract support. Speed of service, however, was improved under this program.

Organizations using FAST to buy goods and services develop their own requirements and bring them to the FAST program. The FAST program structures and executes the appropriate TO competition in coordination with the buyer organization. The FAST home office at Warner Robins ALC handles all contract administration for

⁴⁴ Greene and Thompson, 2000; "Flexible Acquisition and Sustainment Tool (FAST) Draft Request for Proposal/Solicitation," 2000.

⁴⁵ Armor, 1999b.

the basic six contracts, including compliance with goals for small and disadvantaged business, and has technical capabilities to evaluate the prices offered in proposals. Each ALC administers individual orders a little differently. Robins AFB places the orders for the requirements offices in a centralized office and then sends each order back to the relevant requirements office for its administration. Hill AFB uses a decentralized approach to managing FAST: A requirements office places each order and then administers the order there. Tinker AFB uses a hybrid approach: Some of their requirements offices (such as the airborne avionics and the propulsion offices) use a centralized mini-FAST office to place orders for any requirements in those offices; others (such as the aircraft office) decentralize further to allow any contracting officer supporting a weapon system to place the order. In each case, the buyer organization specifies the source selection criteria and evaluates proposals. It also monitors quality on the delivered product.

Program offices at each of the prime contractors also have program management responsibilities. The program in effect gives them the equivalent of total system performance responsibility for their subcontractors. In fact, the prime contractors focus on administrative oversight and leave much technical oversight to the Air Force unless a problem with a subcontractor develops and persists or the Air Force asks for greater intervention. This is why the way in which the prime proposes to manage the team is an evaluation factor considered when making a source selection decision. The team leader program offices can sometimes provide a centralized counterweight to the decentralized Air Force implementation of the FAST program that facilitates integration and learning.

Use of the FAST program was expected from the very beginning to be voluntary. FAST was designed with this in mind.⁴⁶ Customers and providers typically have access to a variety of contracting vehicles that they can use to do business together; the customer generally drives the choice. With its focus on program managers' priorities and

⁴⁶ Greene, 1999a.

the absence of a user fee, FAST sought to encourage its use. The General Services Administration's contracting schedules, for example, are competitive with FAST on small, simple tasks that do not require complex teaming. However, although FAST charges no service fees, it cannot guarantee a customer the lowest gross price for a good or service. Other vehicles sometimes yield lower prices by using different forms of competition and offering access to different providers; through access to different providers, they sometimes also yield better performance. Consequently, FAST did not completely supplant the old process of using contract vehicles outside the Air Force and paying surcharges.

TOs vary dramatically in size. Smaller ones, from, say, \$100,000 to \$4 million, have had little difficulty meeting the schedules required for TO competitions. For larger tasks, customers generally want more time to assess offers. In complex acquisitions, FAST allows industry more time to prepare technical proposals to ensure that the Air Force gets high-quality proposals.

Team leaders depend heavily on their members to market their services to the ALCs and reward their members by including them in TO competitions that result from such marketing. Team leaders prefer members that they have worked with before and that have good relationships with the ALCs they will support. Leaders screen the past performance of their members, performing many of the same tasks that the Air Force PRAG performed in the source selection. Team leaders also seek to mentor smaller members and match their unique capabilities with those of others on the team.

Customers appear generally satisfied with the performance of FAST. More information will become available as the program matures.

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